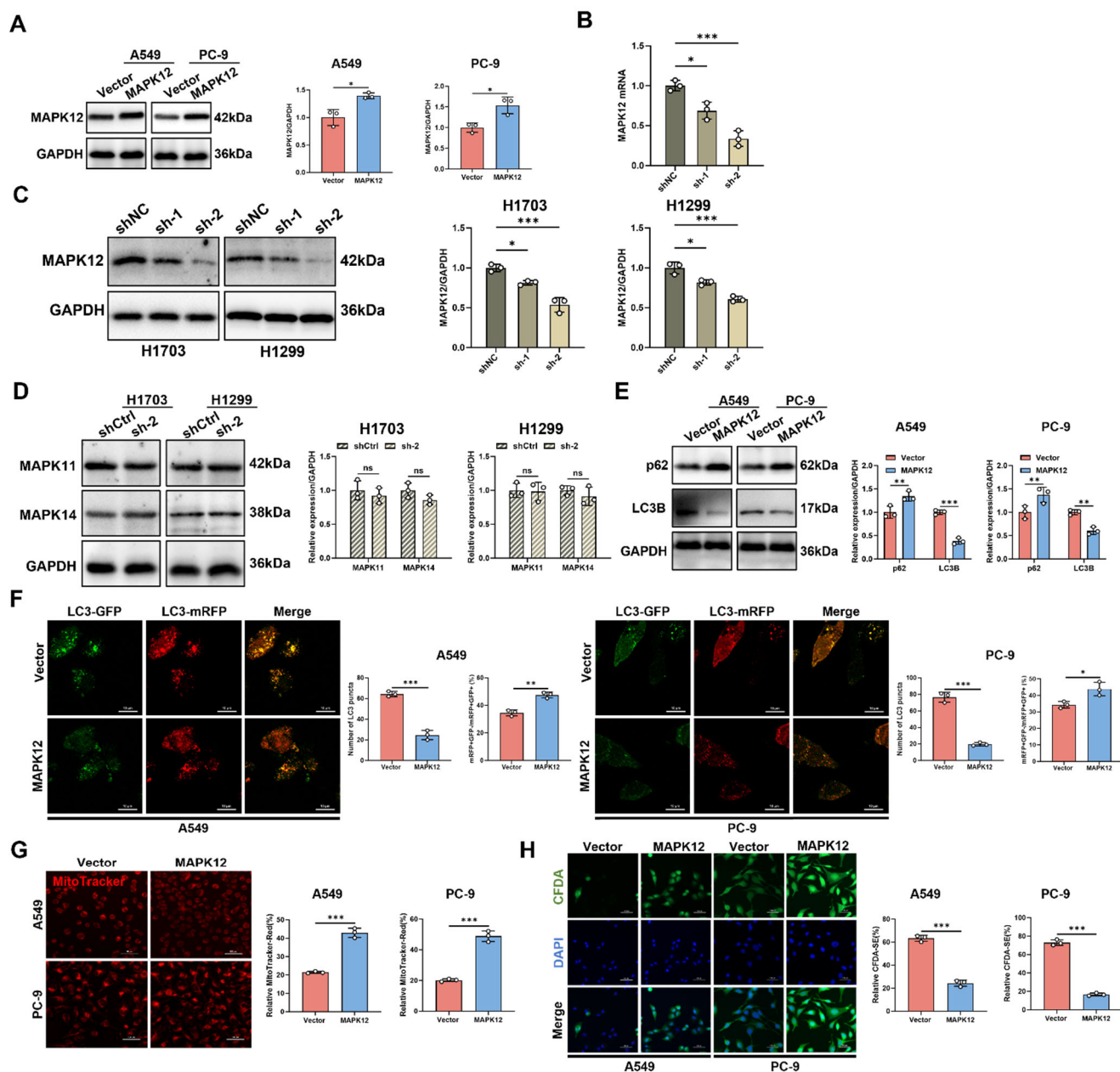


Supplementary Figure legends and Figures

Figure S1: MAPK12 Overexpression Enhances Proliferation and Migration in LUAD Cells



(A) WB analysis and quantification confirm successful overexpression of MAPK12 in A549 and PC-9 cells, n=3.

(B) Quantitative PCR results show the relative knockdown efficiency of MAPK12 mRNA using shMAPK12-1 (sh-1) and shMAPK12-2 (sh-2), n=3.

(C) WB analysis demonstrates reduced MAPK12 protein expression following transfection with sh-1 and sh-2, confirming effective knockdown at the protein level, n=3.

(D) WB analysis shows that MAPK12 knockdown via sh-2 does not affect the protein levels of MAPK11 or MAPK14, indicating target specificity and absence of off-target effects, n=3.

(E) WB analysis shows altered levels of autophagy-related proteins p62 and LC3B after MAPK12 overexpression, n=3.

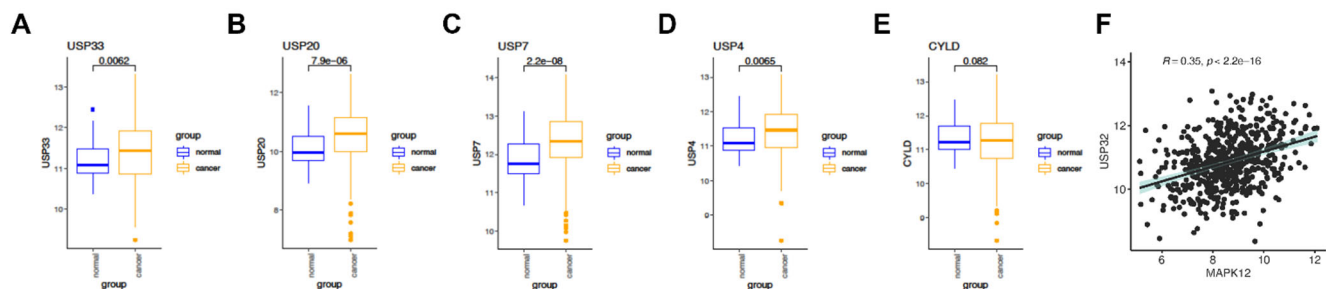
(F) mRFP-GFP-LC3 dual fluorescence imaging reveals decreased autophagosome and autolysosome formation in A549 and PC-9 cells overexpressing MAPK12, n=3.

(G) MitoTracker staining shows changes in mitochondrial morphology associated with MAPK12 overexpression, n=3.

(H) CFDA and DAPI staining confirm increased cell viability in A549 and PC-9 cells due to MAPK12 overexpression, n=3.

* $P < 0.05$; ** $P < 0.01$; *** $P < 0.001$.

Figure S2: Expression patterns of candidate DUBs and transcriptional correlation between USP32 and MAPK12 in LUAD



(A) Box plot showing USP33 expression levels in normal individuals and LUAD patients.

(B) Box plot showing USP20 expression levels in normal individuals and LUAD patients.

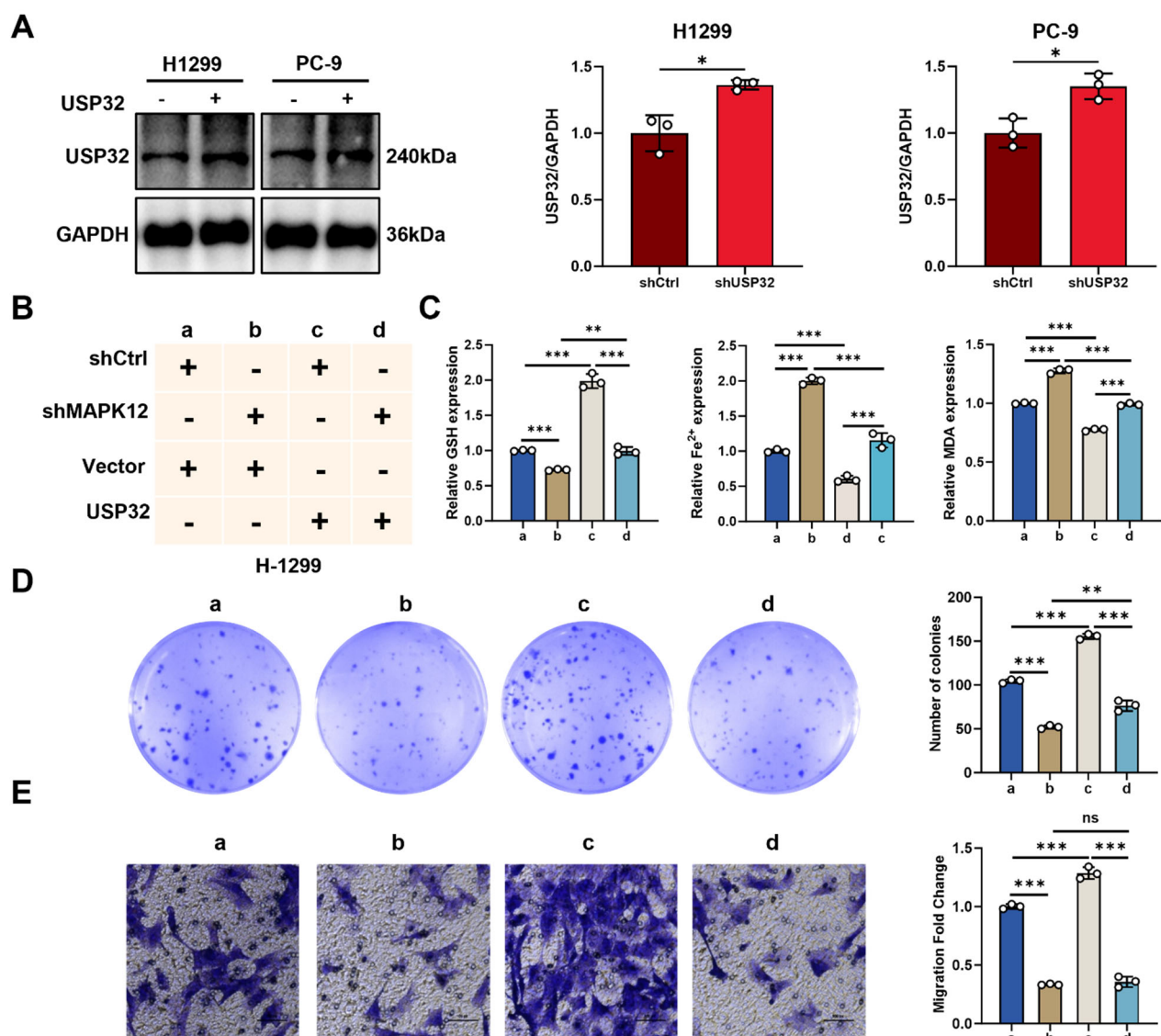
(C) Box plot showing USP7 expression levels in normal individuals and LUAD patients.

(D) Box plot showing USP4 expression levels in normal individuals and LUAD patients.

(E) Box plot showing CYLD expression levels in normal individuals and LUAD patients.

(F) Pearson correlation analysis reveals a significant positive correlation between USP32 and MAPK12 expression.

Figure S3: Overexpression of USP32 promotes proliferation and migration of LUAD cells.



(A) Knockdown of USP32 in NCI-H1299 and A549 cells is validated by WB analysis.

(B) Concurrent MAPK12 knockdown and USP32 overexpression in NCI-H1299 and PC-9 cells are confirmed.

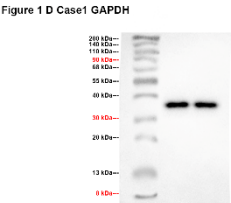
(C) Biochemical assays reveal that MAPK12 knockdown enhances ferroptosis markers (Fe^{2+} , GSH, and MDA) even when USP32 is overexpressed.

(D) Colony formation assays show that MAPK12 knockdown suppresses cell proliferation despite USP32 overexpression.

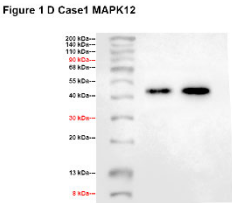
(E) Transwell assays indicate that MAPK12 knockdown reduces cell migration, counteracting the effects of USP32 overexpression.

* $P < 0.05$; ** $P < 0.01$; *** $P < 0.001$.

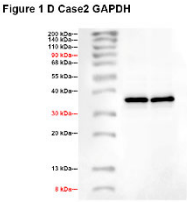
All uncropped blot images



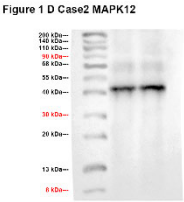
GAPDH (36kDa) .tif



MAPK12 (42kDa) .tif

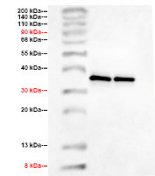


GAPDH (36kDa) .tif



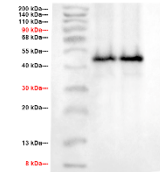
MAPK12 (42kDa) .tif

Figure 1 D Case3 GAPDH



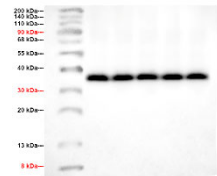
GAPDH (36kDa) .tif

Figure 1 D Case3 MAPK12



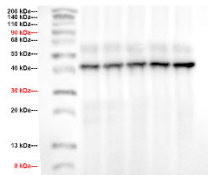
MAPK12 (42kDa) .tif

Figure 1 G GAPDH



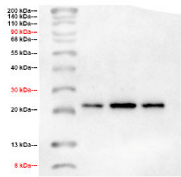
GAPDH (36kDa) .tif

Figure 1 G MAPK12



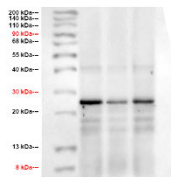
MAPK12 (42kDa) .tif

Figure 1 N H1299 Bax



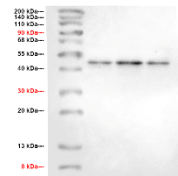
Bax (21kDa) .tif

Figure 1 N H1299 Bcl-2



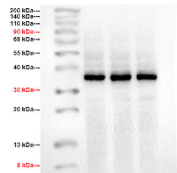
Bcl-2 (26kDa) .tif

Figure 1 N H1299 caspase-9



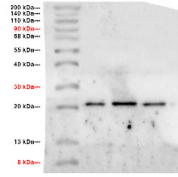
caspase-9 (46kDa) .tif

Figure 1 N H1299 GAPDH



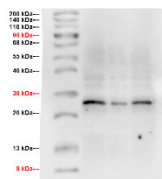
GAPDH (36kDa) .tif

Figure 1 N H1703 Bax



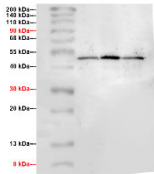
Bax (21kDa) .tif

Figure 1 N H1703 Bcl-2



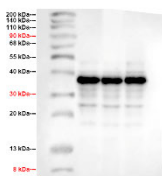
Bcl-2 (26kDa) .tif

Figure 1 N H1703 caspase-9



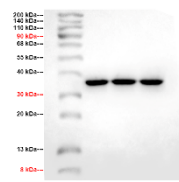
caspase-9 (46kDa) .tif

Figure 1 N H1703 GAPDH



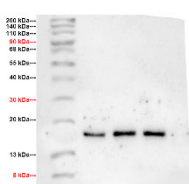
GAPDH (36kDa) .tif

Figure 2 A H1299 GAPDH



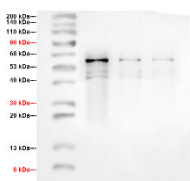
GAPDH (36kDa) .tif

Figure 2 A H1299 LC3B



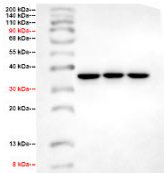
LC3B (17kDa) .tif

Figure 2 A H1299 p62



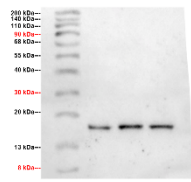
p62 (62kDa) .tif

Figure 2 A H1703 GAPDH



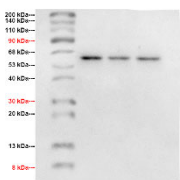
GAPDH (36kDa) .tif

Figure 2 A H1703 LC3B



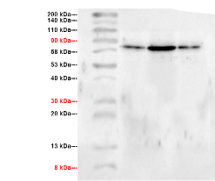
LC3B (17kDa) .tif

Figure 2 A H1703 p62



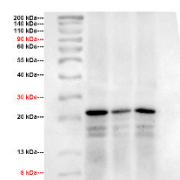
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Figure 3 A H1299 ACSL4



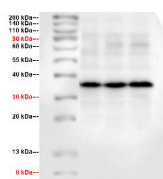
ACSL4 (79kDa) .tif

Figure 3 A H1299 FTH1



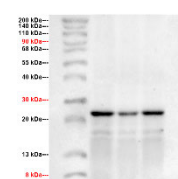
FTH1 (21kDa) .tif

Figure 3 A H1299 GAPDH



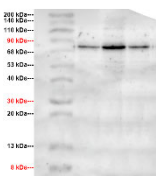
GAPDH (36kDa) .tif

Figure 3 A H1299 GPX4



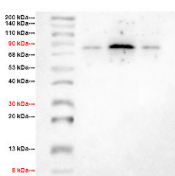
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Figure 3 A H1299 NCOA4



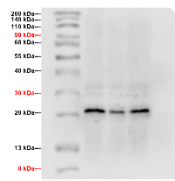
NCOA4 (70kDa) .tif

Figure 3 A H1703 ACSL4



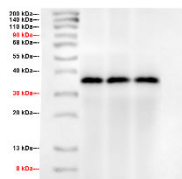
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Figure 3 A H1703 FTH1



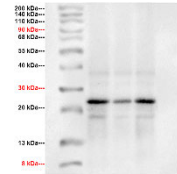
FTH1 (21kDa) .tif

Figure 3 A H1703 GAPDH



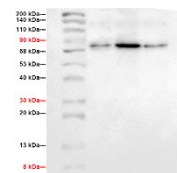
GAPDH (36kDa) .tif

Figure 3 A H1703 GPX4



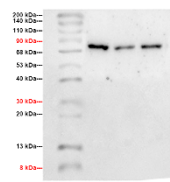
GPX4 (22kDa) .tif

Figure 3 A H1703 NCOA4



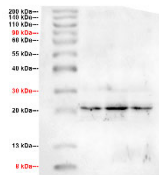
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Figure 3 E A549 ACSL4



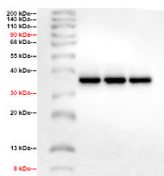
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Figure 3 E A549 FTH1



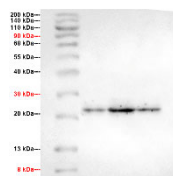
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Figure 3 E A549 GAPDH



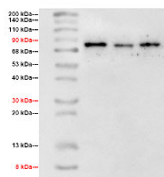
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Figure 3 E A549 GPX4



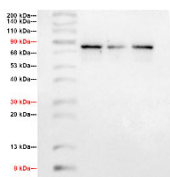
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Figure 3 E A549 NCOA4



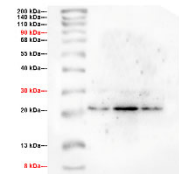
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Figure 3 E PC-9 ACSL4



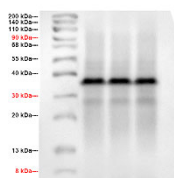
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Figure 3 E PC-9 FTH1



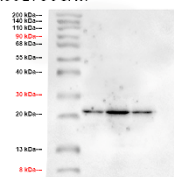
FTH1 (21kDa) .tif

Figure 3 E PC-9 GAPDH



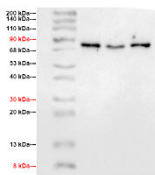
GAPDH (36kDa) .tif

Figure 3 E PC-9 GPX4



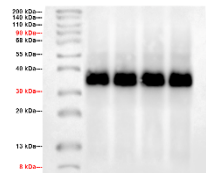
GPX4 (22kDa) .tif

Figure 3 E PC-9 NCOA4



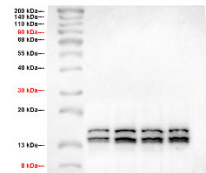
NCOA4 (70kDa) .tif

Figure 4 A GAPDH



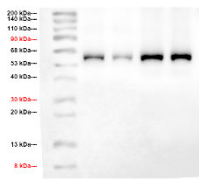
GAPDH (36kDa) .tif

Figure 4 A LC3



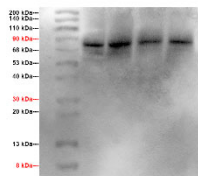
LC3 (14, 16kDa) .tif

Figure 4 A p62



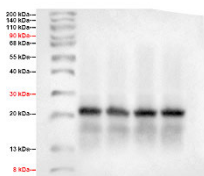
p62 (62kDa) .tif

Figure 4 B ACSL4



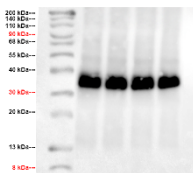
ACSL4 (79kDa) .tif

Figure 4 B FTH1



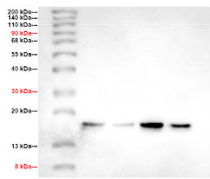
FTH1 (21kDa) .tif

Figure 4 B GAPDH



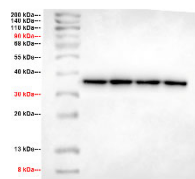
GAPDH (36kDa) .tif

Figure 4 B GPX4



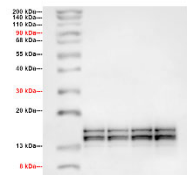
GPX4 (17kDa) .tif

Figure 4 D GAPDH



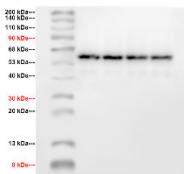
GAPDH (36kDa) .tif

Figure 4 D LC3



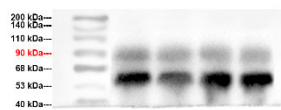
LC3 (14,16kDa) .tif

Figure 4 D p62



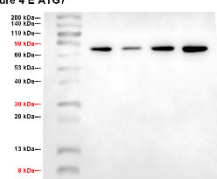
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Figure 4 E ATG5



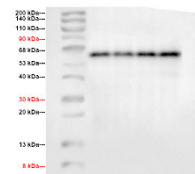
ATG5 (55kDa) .tif

Figure 4 E ATG7



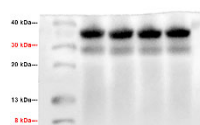
ATG7 (78kDa) .tif

Figure 4 E Beclin 1



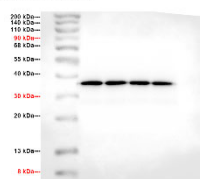
Beclin 1 (60kDa) .tif

Figure 4 E GAPDH



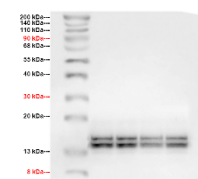
GAPDH (36kDa) .tif

Figure 4 G GAPDH



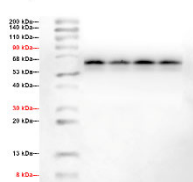
GAPDH (36kDa) .tif

Figure 4 G LC3



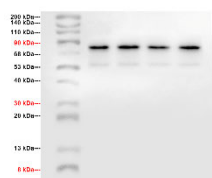
LC3 (14, 16kDa) .tif

Figure 4 G p62



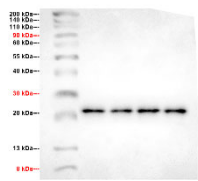
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Figure 4 H ACSL4



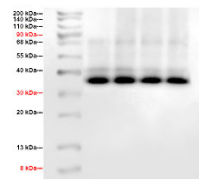
ACSL4 (79kDa) .tif

Figure 4 H FTH1



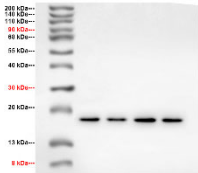
FTH1 (21kDa) .tif

Figure 4 H GAPDH



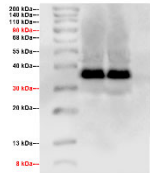
GAPDH (36kDa) .tif

Figure 4 H GPX4



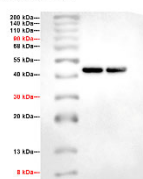
GPX4 (17kDa) .tif

Figure 5 C shCYLD GAPDH



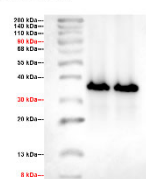
GAPDH (36kDa) .tif

Figure 5 C shCYLD MAPK12



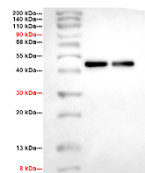
MAPK12 (42kDa) .tif

Figure 5 C shUSP20 GAPDH



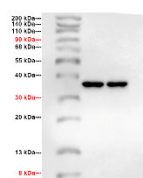
GAPDH (36kDa) .tif

Figure 5 C shUSP20 MAPK12



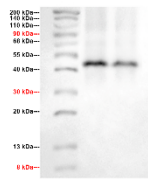
MAPK12 (42kDa) .tif

Figure 5 C shUSP32 GAPDH



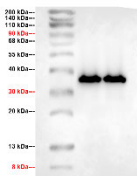
GAPDH (36kDa) .tif

Figure 5 C shUSP32 MAPK12



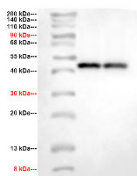
MAPK12 (42kDa) .tif

Figure 5 C shUSP33 GAPDH



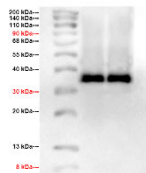
GAPDH (36kDa) .tif

Figure 5 C shUSP33 MAPK12



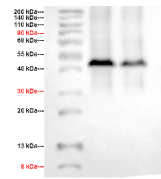
MAPK12 (42kDa) .tif

Figure 5 C shUSP4 GAPDH



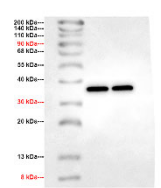
GAPDH (36kDa) .tif

Figure 5 C shUSP4 MAPK12



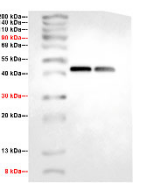
MAPK12 (42kDa) .tif

Figure 5 C shUSP7 GAPDH



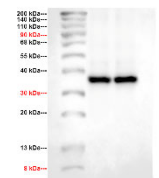
GAPDH (36kDa) .tif

Figure 5 C shUSP7 MAPK12



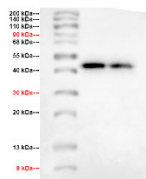
MAPK12 (42kDa) .tif

Figure 5 F H1299 GAPDH



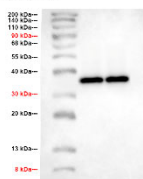
GAPDH (36kDa) .tif

Figure 5 F H1299 MAPK12



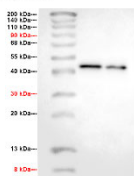
MAPK12 (42kDa) .tif

Figure 5 F H1703 GAPDH



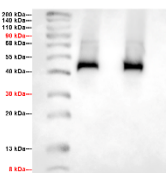
GAPDH (36kDa) .tif

Figure 5 F H1703 MAPK12



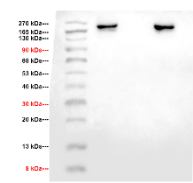
MAPK12 (42kDa) .tif

Figure 5 G MAPK12 MAPK12



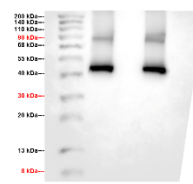
MAPK12 (42kDa) .tif

Figure 5 G MAPK12 USP32



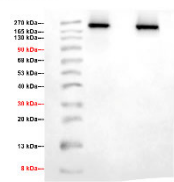
USP32 (240kDa) .tif

Figure 5 G USP32 MAPK12



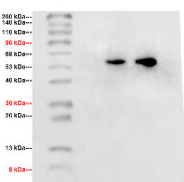
MAPK12 (42kDa) .tif

Figure 5 G USP32 USP32



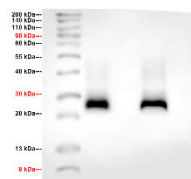
USP32 (240kDa) .tif

Figure 5 H Anti-Flag



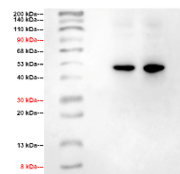
Anti-Flag (54kDa) .tif

Figure 5 H Anti-Myc



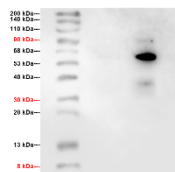
Anti-Myc (25kDa) .tif

Figure 5 H IB Flag



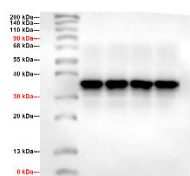
IB Flag (51kDa) .tif

Figure 5 H IB Myc



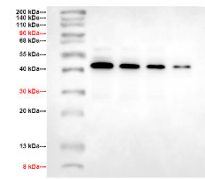
IB Myc (58kDa) .tif

Figure 5 I shNC GAPDH



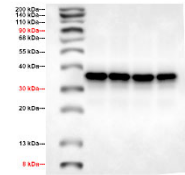
GAPDH (36kDa) .tif

Figure 5 I shNC MAPK12



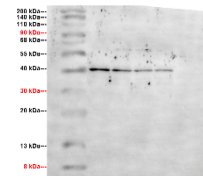
MAPK12 (42kDa) .tif

Figure 5 I shUSP32 GAPDH



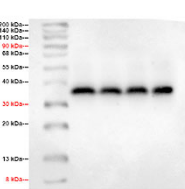
GAPDH (36kDa) .tif

Figure 5 I shUSP32 MAPK12



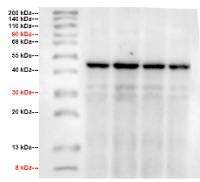
MAPK12 (42kDa) .tif

Figure 5 J USP32 GAPDH



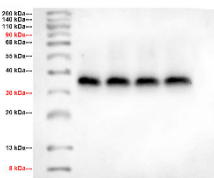
GAPDH (36kDa) .tif

Figure 5 J USP32 MAPK12



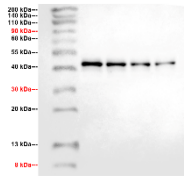
MAPK12 (42kDa) .tif

Figure 5 J Vector GAPDH



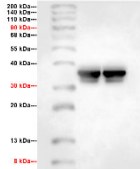
GAPDH (36kDa) .tif

Figure 5 J Vector MAPK12



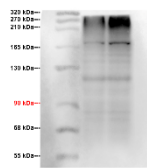
MAPK12 (42kDa) .tif

Figure 5 K GAPDH



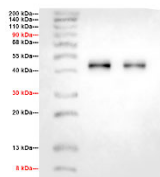
GAPDH (36kDa) .tif

Figure 5 K IB Ub



IB Ub (170kDa) .tif

Figure 5 K MAPK12



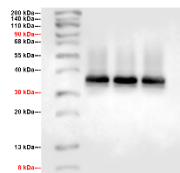
MAPK12 (42kDa) .tif

Figure 5 K USP32



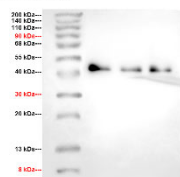
USP32 (240kDa) .tif

Figure 5 L GAPDH



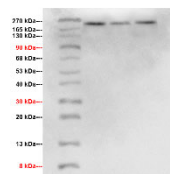
GAPDH (36kDa) .tif

Figure 5 L MAPK12



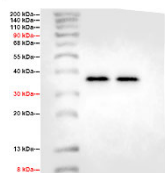
MAPK12 (42kDa) .tif

Figure 5 L USP32



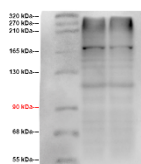
USP32 (240kDa) .tif

Figure 5 M GAPDH



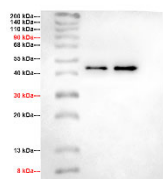
GAPDH (36kDa) .tif

Figure 5 M IB Ub



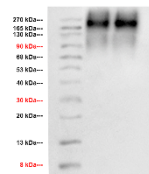
IB Ub (170kDa) .tif

Figure 5 M MAPK12



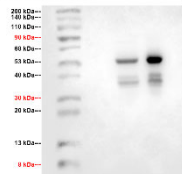
MAPK12 (42kDa) .tif

Figure 5 M USP32



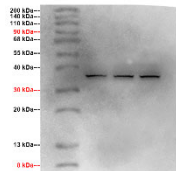
USP32 (240kDa) .tif

Figure 5 O Anti-Flag



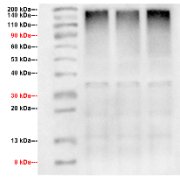
Anti-Flag (54kDa) .tif

Figure 5 O GAPDH



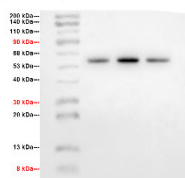
GAPDH (36kDa) .tif

Figure 5 O IB HA



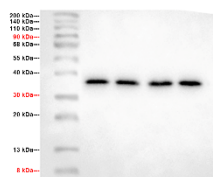
IB HA (175kDa) .tif

Figure 5 O IB Myc



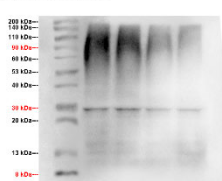
IB Myc (58kDa) .tif

Figure 5 P Ctrl+USP32WT GAPDH



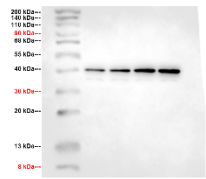
GAPDH (36kDa) .tif

Figure 5 P Ctrl+USP32WT IB Ub



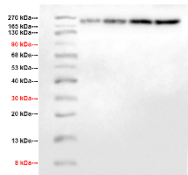
IB Ub (170kDa) .tif

Figure 5 P Ctrl+USP32WT MAPK12



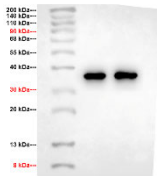
MAPK12 (42kDa) .tif

Figure 5 P Ctrl+USP32WT USP32



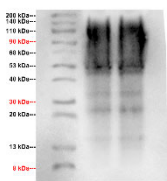
USP32 (240kDa) .tif

Figure 5 P USP32C743A GAPDH



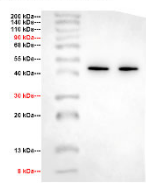
GAPDH (36kDa) .tif

Figure 5 P USP32C743A IB Ub



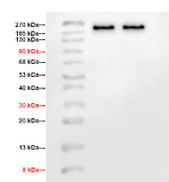
IB Ub (170kDa) .tif

Figure 5 P USP32C743A MAPK12



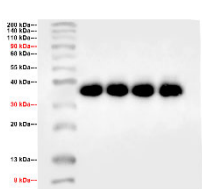
MAPK12 (42kDa) .tif

Figure 5 P USP32C743A USP32



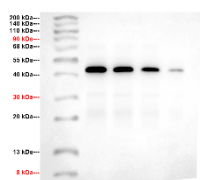
USP32 (240kDa) .tif

Figure 5 Q USP32C742A GAPDH



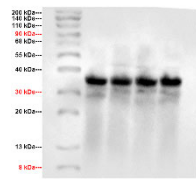
GAPDH (36kDa) .tif

Figure 5 Q USP32C742A MAPK12



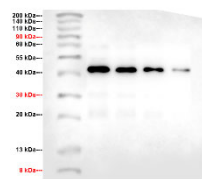
MAPK12 (42kDa) .tif

Figure 5 Q Vector GAPDH



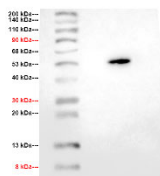
GAPDH (36kDa) .tif

Figure 5 Q Vector MAPK12



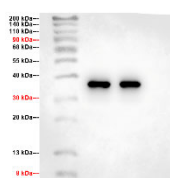
MAPK12 (42kDa) .tif

Figure 5 R Lys48 Anti-Flag



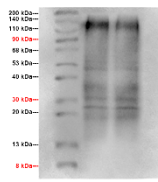
Anti-Flag (54kDa) .tif

Figure 5 R Lys48 GAPDH



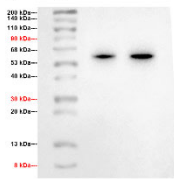
GAPDH (36kDa) .tif

Figure 5 R Lys48 IB HA



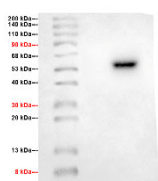
IB HA (175kDa) .tif

Figure 5 R Lys48 IB Myc



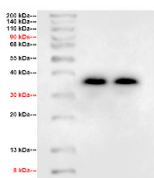
IB Myc (58kDa) .tif

Figure 5 R Lys63 Anti-Flag



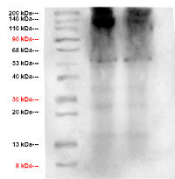
Anti-Flag (54kDa) .tif

Figure 5 R Lys63 GAPDH



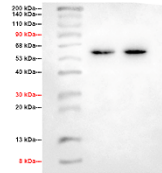
GAPDH (36kDa) .tif

Figure 5 R Lys63 IB HA



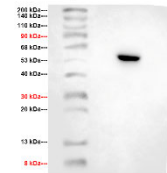
IB HA (175kDa) .tif

Figure 5 R Lys63 IB Myc



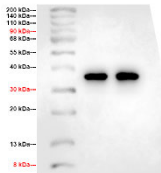
IB Myc (58kDa) .tif

Figure 5 R WT Anti-Flag



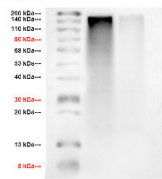
Anti-Flag (54kDa) .tif

Figure 5 R WT GAPDH



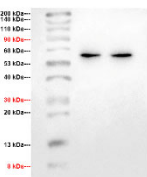
GAPDH (36kDa) .tif

Figure 5 R WT IB HA



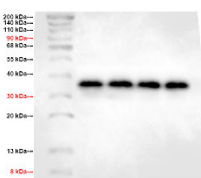
IB HA (175kDa) .tif

Figure 5 R WT IB Myc



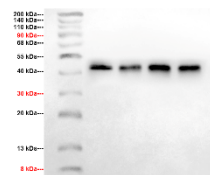
IB Myc (58kDa) .tif

Figure 5 S GAPDH



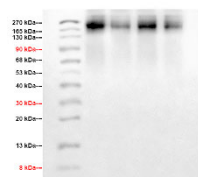
GAPDH (36kDa) .tif

Figure 5 S GAPDH



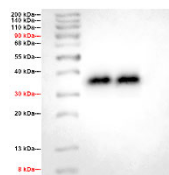
MAPK12 (42kDa) .tif

Figure 5 S GAPDH



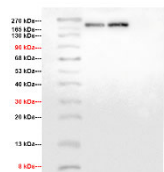
USP32 (240kDa) .tif

Figure 6 A Case1 GAPDH



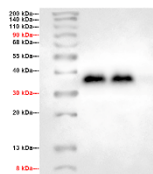
GAPDH (36kDa) .tif

Figure 6 A Case1 USP32



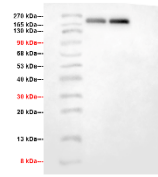
USP32 (240kDa) .tif

Figure 6 A Case2 GAPDH



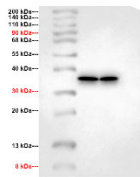
GAPDH (36kDa) .tif

Figure 6 A Case2 USP32



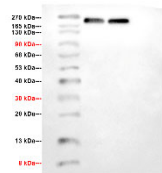
USP32 (240kDa) .tif

Figure 6 A Case3 GAPDH



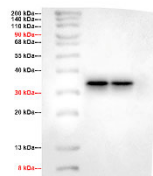
GAPDH (36kDa) .tif

Figure 6 A Case3 USP32



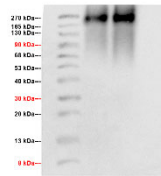
USP32 (240kDa) .tif

Figure 6 A Case4 GAPDH



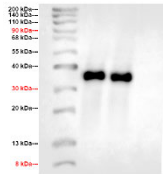
GAPDH (36kDa) .tif

Figure 6 A Case4 USP32



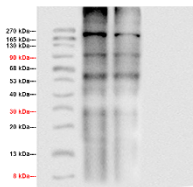
USP32 (240kDa) .tif

Figure 6 B A549 GAPDH



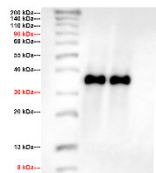
GAPDH (36kDa) .tif

Figure 6 B A549 USP32



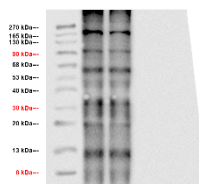
USP32 (240kDa) .tif

Figure 6 B H1703 GAPDH



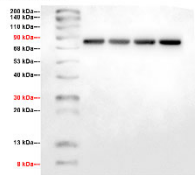
GAPDH (36kDa) .tif

Figure 6 B H1703 USP32



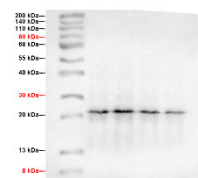
USP32 (240kDa) .tif

Figure 6 H ACSL4



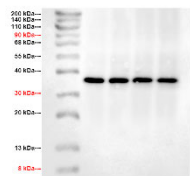
ACSL4 (79kDa) .tif

Figure 6 H FTH1

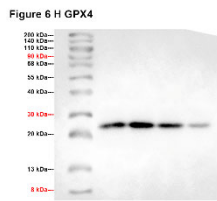


FTH1 (21kDa) .tif

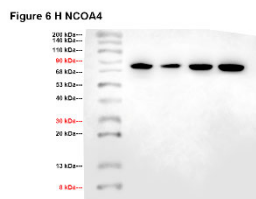
Figure 6 H GAPDH



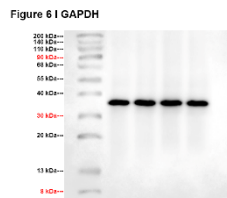
GAPDH (36kDa) .tif



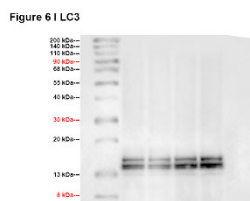
GPX4 (22kDa) .tif



NCOA4 (70kDa) .tif

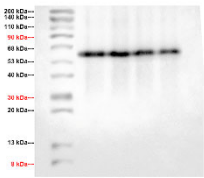


GAPDH (36kDa) .tif



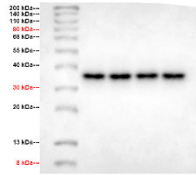
LC3 (14,16kDa) .tif

Figure 6 I p62



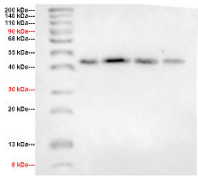
p62 (62kDa) .tif

Figure 6 M GAPDH



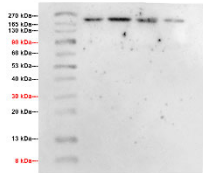
GAPDH (36kDa) .tif

Figure 6 M MAPK12



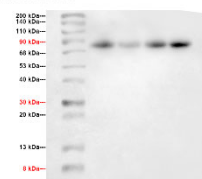
MAPK12 (42kDa) .tif

Figure 6 M USP32



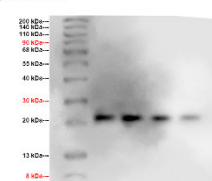
USP32 (240kDa) .tif

Figure 6 N ACSL4



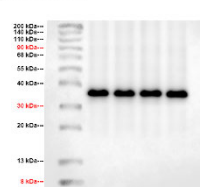
ACSL4 (79kDa) .tif

Figure 6 N FTH1



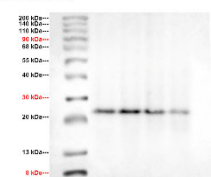
FTH1 (21kDa) .tif

Figure 6 N GAPDH



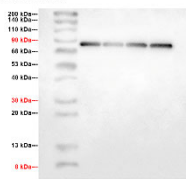
GAPDH (36kDa) .tif

Figure 6 N GPX4



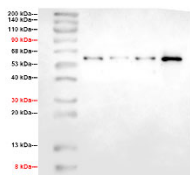
GPX4 (22kDa) .tif

Figure 6 N NCOA4



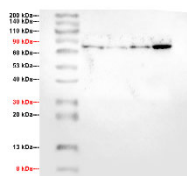
NCOA4 (70kDa) .tif

Figure 6 O ATG5



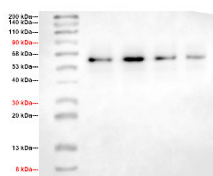
ATG5 (55kDa) .tif

Figure 6 O ATG7



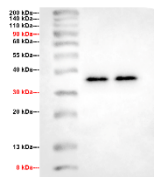
ATG7 (78kDa) .tif

Figure 6 O p62



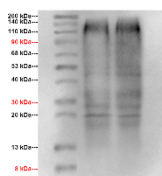
p62 (62kDa) .tif

Figure 7 B GAPDH



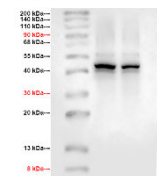
GAPDH (36kDa) .tif

Figure 7 B IB Ub



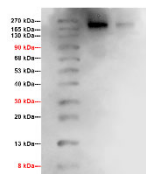
IB Ub (170kDa) .tif

Figure 7 B MAPK12



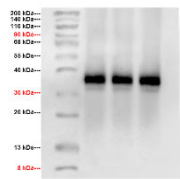
MAPK12 (42kDa) .tif

Figure 7 B USP32



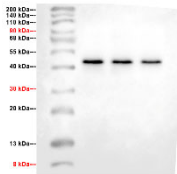
USP32 (240kDa) .tif

Figure 7 C DMSO GAPDH



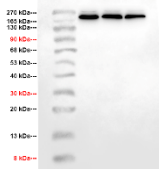
GAPDH (36kDa) .tif

Figure 7 C DMSO MAPK12



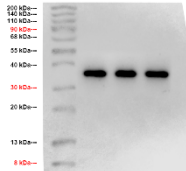
MAPK12 (42kDa) .tif

Figure 7 C DMSO USP32



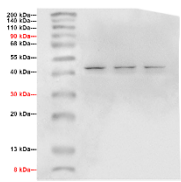
USP32 (240kDa) .tif

Figure 7 C Ub4tx (10 Mm) GAPDH



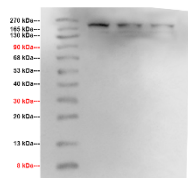
GAPDH (36kDa) .tif

Figure 7 C Ub4ix (10 Mn) MAPK12



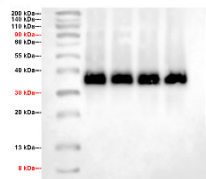
MAPK12 (42kDa) .tif

Figure 7 C Ub4ix (10 Mn) USP32



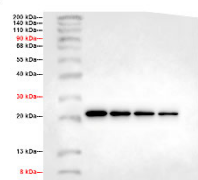
USP32 (240kDa) .tif

Figure 7 F GAPDH



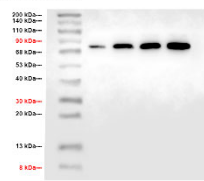
GAPDH (36kDa) .tif

Figure 7 F GPX4



GPX4 (22kDa) .tif

Figure 7 F NCOA4



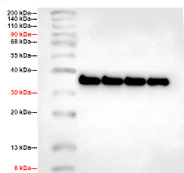
NCOA4 (70kDa) .tif

Figure 7 F p62



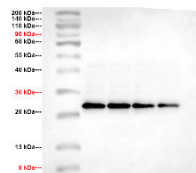
p62 (62kDa) .tif

Figure 7 K GAPDH



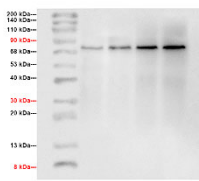
GAPDH (36kDa) .tif

Figure 7 K GPX4



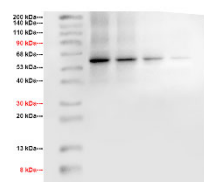
GPX4 (22kDa) .tif

Figure 7 K NCOA4



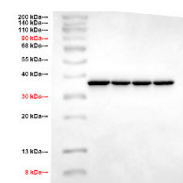
NCOA4 (70kDa) .tif

Figure 7 K p62



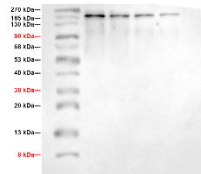
p62 (62kDa) .tif

Figure 7 L GAPDH



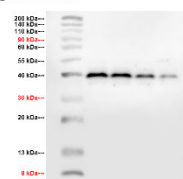
GAPDH (36kDa) .tif

Figure 7 L MAPK12



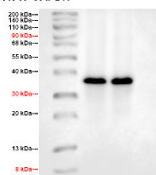
MAPK12 (240kDa) .tif

Figure 7 L USP32



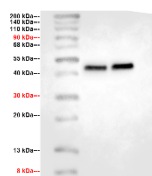
USP32 (42kDa) .tif

Figure S1 A A549 GAPDH



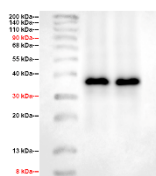
GAPDH (36kDa) .tif

Figure S1 A A549 MAPK12



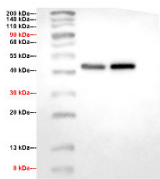
MAPK12 (42kDa) .tif

Figure S1 A PC-9 GAPDH



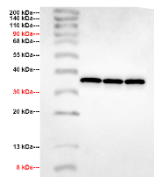
GAPDH (36kDa) .tif

Figure S1 A PC-9 MAPK12



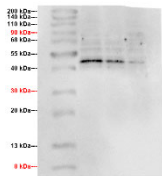
MAPK12 (42kDa) .tif

Figure S1 C H1299 GAPDH



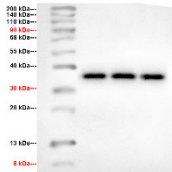
GAPDH (36kDa) .tif

Figure S1 C H1299 MAPK12



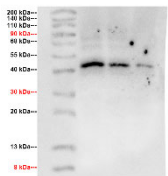
MAPK12 (42kDa) .tif

Figure S1 C H1703 GAPDH



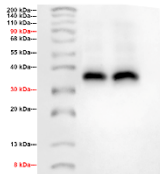
GAPDH (36kDa) .tif

Figure S1 C H1703 MAPK12



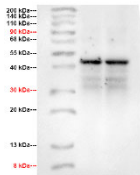
MAPK12 (42kDa) .tif

Figure S1 D H1299 GAPDH



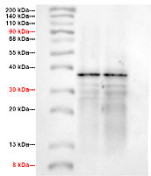
GAPDH (36kDa) .tif

Figure S1 D H1299 MAPK11



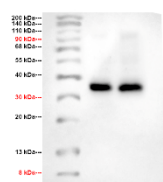
MAPK11 (42kDa) .tif

Figure S1 D H1299 MAPK14



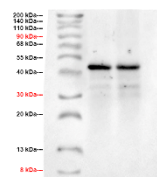
MAPK14 (38kDa) .tif

Figure S1 D H1703 GAPDH



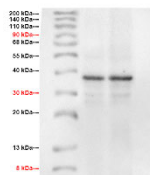
GAPDH (36kDa) .tif

Figure S1 D H1703 MAPK11



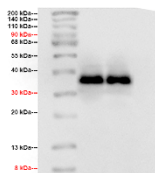
MAPK11 (42kDa) .tif

Figure S1 D H1703 MAPK14



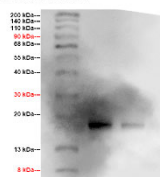
MAPK14 (38kDa) .tif

Figure S1 E A549 GAPDH



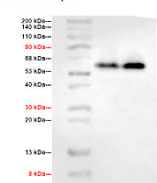
GAPDH (36kDa) .tif

Figure S1 E A549 LC3B



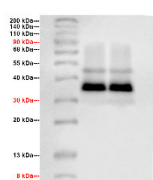
LC3B (17kDa) .tif

Figure S1 E A549 p62



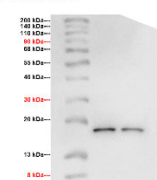
p62 (62kDa) .tif

Figure S1 E PC-9 GAPDH



GAPDH (36kDa) .tif

Figure S1 E PC-9 LC3B



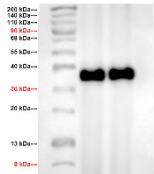
LC3B (17kDa) .tif

Figure S1 E PC-9 p62



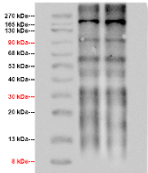
p62 (62kDa) .tif

Figure S3 A H1299 GAPDH



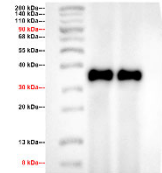
GAPDH(36kDa) .tif

Figure S3 A H1299 USP32



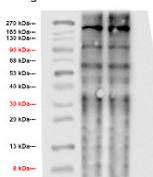
USP32 (240kDa) .tif

Figure S3 A PC-9 GAPDH



GAPDH (36kDa) .tif

Figure S3 A PC-9 USP32



USP32 (240kDa) .tif