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SAMHD1 acts at stalled replication forks to prevent interferon induction

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SUPPLEMENTAL INFORMATION

Antibodies used in human cells

Antibody	Catalog No.	Dilution
Mouse anti-BrdU clone B44	347580, BD Biosciences	1/100
Rat anti-BrdU clone BU1/75	ABC117-7513, Eurobio Abcys	1/100
anti-BrdU for ssDNA foci	347580, BD Biosciences	1/20
anti-ssDNA	MAB3868, Millipore	1/250
anti-pCHK1 (S345)	2348, Cell signaling	1/1000
anti-pCHK2 (T68)	2661, Cell signaling	1/1000
anti- γ -H2AX (S139)	05-636, Millipore	1/1000
anti-SAMHD1	A303-691A, Bethyl	1/5000
anti-pSAMHD1 (T592)	Cribier et.al. 2013	1/500
anti-HA	Clone3F10, Roche	1/300
anti-actin	A4700, Sigma	1/500
anti-RPA1	Ab79398	1/300
anti-RECQ1	A300-450A, Bethyl	1/5000
anti-cGAS	15102, Cell Signaling Technology	1/1000
anti-IRF3	4302, Cell Signaling Technology	1/1000
anti-TBP	8515, Cell Signaling Technology	1/1000

Antibodies used in *Xenopus* extracts

Antibody	Source	Identifier	Dilution
Anti-Xenopus SAMHD1 (affinity purified Rabbit serum)	This study (Biogenes)	BioGenes Serum #25130	1/500
Anti-Xenopus Pol a p180 (Mouse monoclonal)	Described in ²⁸	Abmart: clone 13026-1-3/C199	1/1000
Anti-Orc1 (Mouse monoclonal)	Described in ⁵²	-	1/5000
Anti-xMre11 (Rabbit polyclonal)	Kindly provided by Jean Gautier, Columbia University, described in ⁵³	-	1/3000
Anti-xRPA70 (Rabbit polyclonal)	Kindly provided by Jean Gautier, Columbia University, described in ⁵³	-	1/5000
Anti-xCtIP (Mouse monoclonal)	Kindly provided by Jean Gautier, Columbia University, described in ⁵⁴	-	1/30
Anti-xATR	Described in ⁵²	-	1/1000
Anti-xATM	Described in ⁵²	-	1/1000
Anti-ATM pSerine 1981	Rockland Immunochemicals	200-301-400	1/1000
Anti-Phospho-Chk1 (Ser345) (133D3)	Cell Signaling	mAb #2348	1/500
Anti-Chk1 (G-4)	Santa Cruz	sc-8408	1/500
Anti-Histone H2B	Millipore	clone 07-371; RRID: AB_310561	1/5000
Anti-Mcm7	Santa Cruz	sc-9966	1/5000
Anti-Rad51 (mouse monoclonal)	Abcam	clone ab123	1/1000
Anti-phospho-Histone H2A.X (Ser139)	Millipore	clone JBW301	1/1000

siRNAs

siRNA name	orientation	siRNA sequences 5' to 3' orientation
si-Ctrl	sense	UUCUCCGAACGUGUCACGUTT
	antisense	ACGUGACACGUUCGGAGAATT
si-RAD51	sense	GAAGCUAUGUUCGCCAUUA
	antisense	UAAUGGCGAACAUAGCUUCTT
si-MRE11	sense	GAUGCCAUUGAGGAAUAAG
	antisense	CUUAUUCCUCAUUGGCAUCTT
si-Non-target	sense	AUGAACGUGAAUUGCUCAA
	antisense	UUGAGCAAUUCACGUUCAUTT
si-CtIP	sense	GCUAAAACAGGAACGAAUC
	antisense	GAUUCGUUCCUGUUUUAGCTT
si-RECQ1	siRNA-SMART pool	#4390824, ID 5965,
		ThermoFisher Scientific
Si-TREX1	TREX-1 siRNA pool	sc-63157, Santa Cruz
si-SAMHD1	SI04243673	Qiagen
si-STING	sense	GGUCAUAUUACAUCGGACAtt
	antisense	UAUCCGAUGUAAUAUGACCat
si-cGAS	sense	CCUUCUCUCACAUCGAAAAtt
	antisense	UUUUCGAUGUGAGAGAAGGat
si-IFR3	sense	AACUCAUCCAGAAUGUCUCCUGGG
	antisense	CCCAGGAAGACAUUCUGGAUGAGUU

Primer sequences

primer name	orientation	Primer sequences 5' to 3' orientation
GAPDH	Forward	TGCACCACCAACTGCTTAGC
	Reverse	GGCATGGACTGTGGTCATGAG
IFN- α	Forward	GTGAGGAAATACTTCCAAAGAATCAC
	Reverse	TCTCATGATTTCTGCTCTGACAA
IFN- β	Forward	AGCTGAAGCAGTTCCAGAAG
	Reverse	AGTCTCATTCCAGCCAGTGC
IFN- γ	Forward	GTGGTGCTGGTGACTTTGG
	Reverse	CTCCTGTGGTGACAGAGATTTG
TNF- α	Forward	CCTCTCTCTAATCAGCCCTCTG
	Reverse	GAGGACCTGGGAGTAGATGAG
Mx1	Forward	ATGAGCTAATCACCTGGAG
	Reverse	ATACCCAATGTCAGCAGGC
ISG15	Forward	CGCAGATCACCCAGAAGATCG
	Reverse	TTCGTCGCATTTGTCCACCA
STING	Forward	CATGGGCTGGCATGGTCATA
	Reverse	ATATACAGCCGCTGGCTCAC
MT-CO1 (COX1)	Forward	CCCCGATATGGCGTTTCC
	Reverse	GTTCAACCTGTTCCCTGCTCC