

Table S1. Primer sequences

Real-time PCR	Human Primers
<i>ADAT2</i> - F	CGACATGCAGAAATGGTGGC
<i>ADAT2</i> - R	ACCAGCGGGATTTTCATCAGG
<i>GAPDH</i> - F	GCACCACCAACTGCTTAGCA
<i>GAPDH</i> - R	TCTTCTGGGTGGCAGTGATG
<i>β-ACTIN</i> - F	CTCACCATGGATGATGATATCGC
<i>β-ACTIN</i> - R	GGAATCCTTCTGACCCATGCC
<i>HDAC7</i> - F	CTCTCGCCGTCTCACAGTC
<i>HDAC7</i> - R	CTCACCTGGGTCCCATCAGC
<i>Luciferase</i> - F	AAGTAGTGTGTGCCCCGTCTG
<i>Luciferase</i> - R	CCTCTGGTTTCCCTTTCGCT
<i>KRT7</i> - F	GCCAGGGAACTAGCTGGG
<i>KRT7</i> - R	AGAACCTAGAGATCCCGCTC
<i>SPHK1</i> - F	GGTTATGGATCCAGTGGTCGG
<i>SPHK1</i> - R	CCCGCTGAGAAAACAAAACCA
<i>ATP6V1E2</i> - F	ATTTACCTCCACCCGGAAG
<i>ATP6V1E2</i> - R	AGTTCAGGCCTCCCTTTTGG
<i>SLCO4A1</i> - F	GAGACGGGGACGGACACA
<i>SLCO4A1</i> - R	CTGATGCAGGGGCATCTCC
<i>WNT7B</i> - F	GGCCCACCATGCTTCTACTG
<i>WNT7B</i> - R	CCACGGATGACAGTGCTAAGT
<i>ZDHC1</i> - F	CGGATCCGACCCAGAAAAA
<i>ZDHC1</i> - R	GAATCCGTCGACGAGCTGGAG

Table S2. Antibody list

Antibody	Vendor	Cat no.	Dilution for WB	Dilution for IHC	Dilution for IF
ADAT2	Abbexa	abx230153	1:500	1:100	1:100
HDAC7	Cell signaling	33418	1:1000	1:100	
Non-phospho (Active) β -Caten	Cell signaling	8814	1:1000	1:500	
β -Catenin	Cell signaling	8480	1:1000		
Ki-67	Cell signaling	12202		1:500	
Vimentin	Cell signaling	5741	1:1000		
E-cadherin	Cell signaling	14472	1:1000		
Cleave caspase7	Cell signaling	9491	1:500		
Caspase7	Cell signaling	9492	1:1000		
Cleave PARP	Cell signaling	5625	1:1000		
PARP	Cell signaling	9532	1:1000		
PCNA	Cell signaling	13110	1:1000		
Cyclin D1	Cell signaling	2922	1:1000		
c-Myc	Cell signaling	9402	1:1000		
Lamin A/C	Cell signaling	4777	1:1000		
LGR5	Origene	TA503316	1:1000		
CD133	Cell signaling	64326	1:1000		
CD44	Cell signaling	5640	1:1000		
EphB2	Cell signaling	83029	1:1000		
Puromycin	Sigma-Aldrich	12D10	1:25,000		
GAPDH	Cell signaling	5174	1:1000		
β -actin	Cell signaling	4970	1:1000		
IgG (rabbit)	Sigma-Aldrich	12-370			

Table S3. Oligonucleotide sequences

Name	Sequences
sgRNA#1 targeting <i>ADAT2</i>	GTCTACAACAATGAAGTTGT
sgRNA#2 targeting <i>ADAT2</i>	GAAAATACTGAAGTTCCTGT
sgRNA#3 targeting <i>ADAT2</i>	GCTTCCTCAGCCCGATATCC
sgRNA targeting <i>HDAC7</i>	GCGCTCGGTGGAGCCCATGA
siRNA#1 targeting <i>ADAT2</i>	sense: 5'-GCUGUCAGAAUGAACGAUUTT-3' anti-sense: 5'-AAUCGUUCAUUCUGACAGCTT-3'
siRNA#2 targeting <i>ADAT2</i>	sense: 5'-GCAGUGGAAAUGUUAAGATT-3' anti-sense: 5'-UCUUUAACAUUUCCACUGCTT-3'
siRNA#3 targeting <i>ADAT2</i>	sense: 5'-GUCCCUCUGAAGUAUUUGATT-3' anti-sense: 5'-UCAAUACUUCAGAGGGACTT-3'
siRNA#4 targeting <i>ADAT2</i>	sense: 5'-GCUGUCUUAUGGUCUACAATT-3' anti-sense: 5'-UUGUAGACCAUAAGACAGCTT-3'
siRNA#5 targeting <i>ADAT2</i>	sense: 5'-ACUCGACAUUCAGUGAUGGTT-3' anti-sense: 5'-CCAUCACUGAAUGUCGAGUTT-3'

Table S4. Sequences of ADAT2 sgRNAs for CRISPR domain–targeting assay

Name	Forward (5'–3')	Reverse (5'–3')
sg-1	GCACCCAAGCCAGCTGCAAG	AAACCTTGCAGCTGGCTTGGGTGC
sg-2	CGCGTGCTCGGTGTCGGCAG	AAACCTGCCGACACCGAGCACGCG
sg-3	AGAGGAGACCGAAAAGTGGA	AAACTCCACTTTTCGGTCTCCTCT
sg-4	GATGGAGGAGGCGATGCACA	AAACTGTGCATCGCCTCCTCCATC
sg-5	AGTATTTTCGAGGGCTTCTT	AAACAAGAAGCCCTCGAAAATACT
sg-6	AGTTCCTGTTGGCTGTCTTA	AAACTAAGACAGCCAACAGGAACT
sg-7	GTCTACAACAATGAAGTTGT	AAACACAACCTTCATTGTTGTAGAC
sg-8	TACTCGACATGCAGAAATGG	AAACCCATTTCTGCATGTCGAGTA
sg-9	CCATCGATCAGGTCCTCGAT	AAACATCGAGGACCTGATCGATGG
sg-10	CACTTTGACGACACCAATCG	AAACCGATTGGTGTCTGTCAAAGTG
sg-11	GTGTGTTCAAATACTTCAGA	AAACTCTGAAGTATTTGAACACAC
sg-12	CACTGTGTTGTATGTCACTG	AAACCAGTGACATACAACACAGTG
sg-13	GCAGCTGCACACATAATGCA	AAACTGCATTATGTGTGCAGCTGC
sg-14	GACAGCCATATACAACCAGC	AAACGCTGGTTGTATATGGCTGTC
sg-15	AATGAACGATTTGGTGGTTG	AAACCAACCACCAAATCGTTCATT
sg-16	AGTGTTTGGTAGGTCAGCAG	AAACCTGCTGACCTACCAAACACT
sg-17	TGAAATGGTCTCCCAGTGTT	AAACAACACTGGGAGACCATTTC
sg-18	TATCCCTGGATATCGGGCTG	AAACCAGCCCGATATCCAGGGATA
sg-19	AAAATCGAAAGTTCGGAAAA	AAACTTTTCCGAACTTTCGATTTT