The RNA-binding protein ZC3H11A interacts with the nuclear poly(A)-binding protein PABPN1 and alters polyadenylation of viral transcripts

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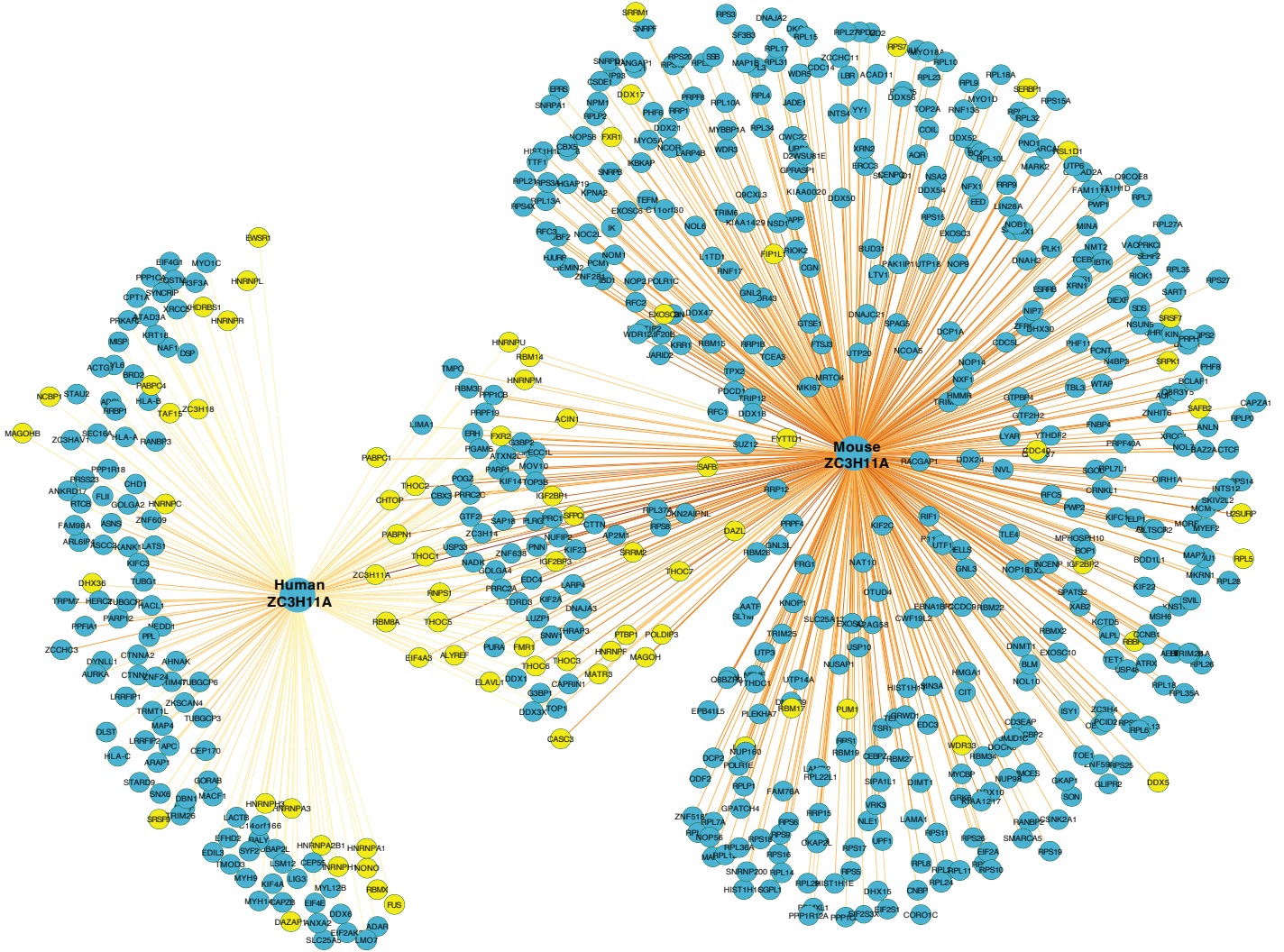

Figure S1. A comparison between human and mouse ZC3H11A interactome. Network analysis of the identified ZC3H11A-interacting partners ZC3H11A in human (HeLa) and mouse (mESCs) cells based on co-Ips (adjusted P <0.05). Yellow circles highlight proteins involved in 3'UTR mRNA processing based on the STRING database.

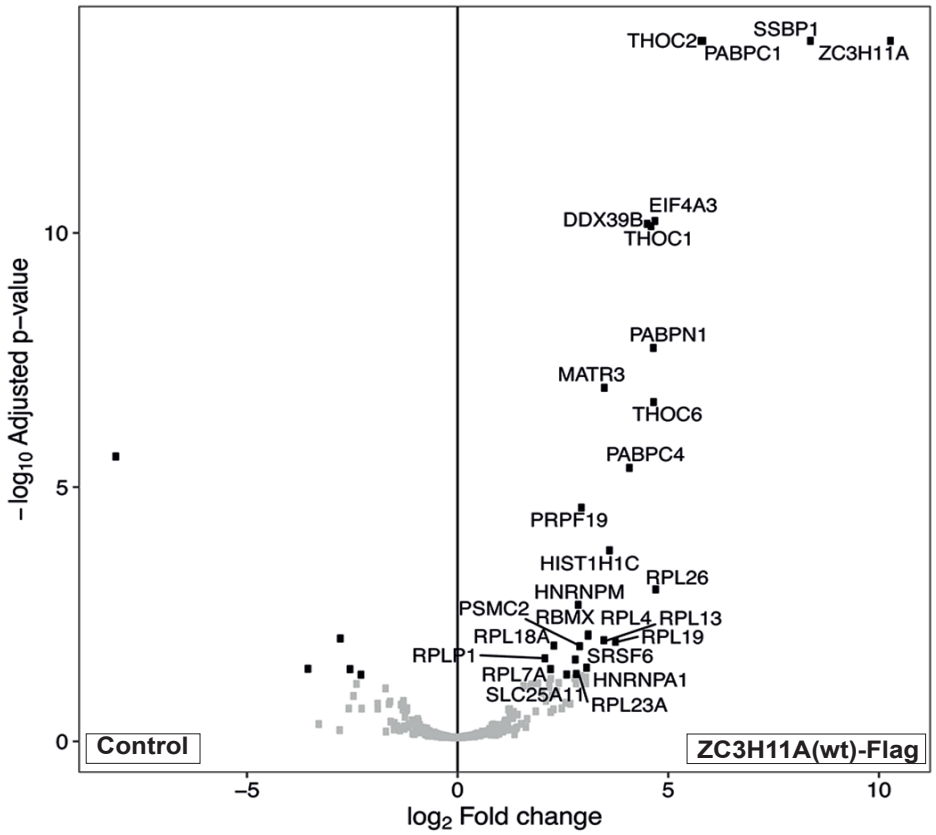

Figure S2. The ZC3H11A-Flag interacts with subunits of the TREX complex and PABPs. Volcano plot showing identified proteins that specifically interact with the ZC3H11A(wt)-Flag protein in HeLa cells. An adjusted P-value cut off of 0.05 and a log2 fold change cut off of 2 was used. Data are shown from a biological triplicate experiment. Control; cells transfected with pcDNA(C-Flag) plasmid, ZC3H11A(wt)-Flag; cells transfected with pcDNA-ZC3H11A(wt)-Flag plasmid.

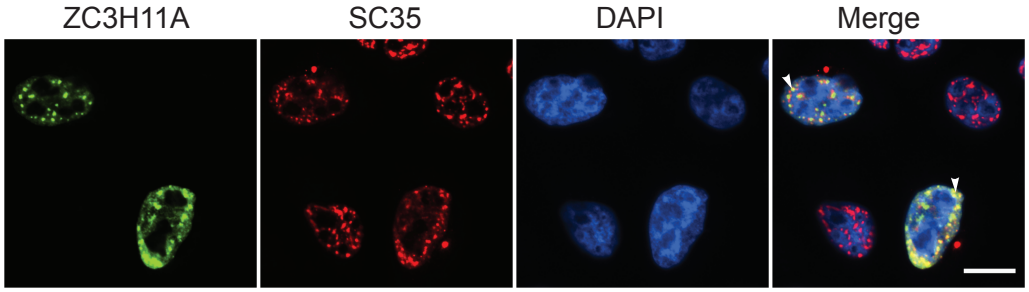

Figure S3. ZC3H11A localization into nuclear speckles. HeLa cells were transfected with the ZC3H11A-Flag encoding plasmids for 24 h. Indirect immunofluorescence (IF) was done with the anti-Flag and anti-SC35 antibodies. Cells were counterstained with DAPI. White arrowheads indicate typical colocalization of the SC35 and ZC3H11A-Flag. Scalebar is 20 μm.

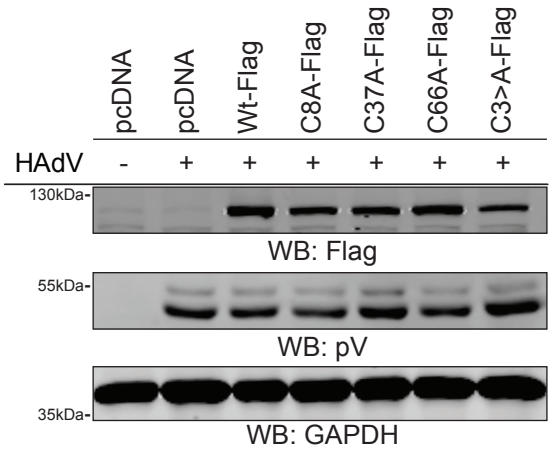

Figure S4. Expression levels of the ZC3H11A-Flag mutant proteins in HAdV-5-infected A549 cells. Cells were transfected with respective plasmids for 24h, followed by HAdV-5 infection (MOI= 5, 48h). Whole cell lysates were separted on 9% SDS-PAGE and western blot was done using the anti-Flag (detects ZC3-Flag), anti-pV (virus capsid protein, marker for HAdV-5 infection) and anti-GAPDH antibodies.

Table S1.

List of PCR primers used in this study

Target Purpose	**Forward primer (5'-3')**	**Reverse primer (5'-3')**
SNHG10 qRT-PCR	GTTATTGACTTCCTACCCAGCA	CTGGAATCAATGAATCACGTTC
SNHG19 qRT-PCR	CGTCCAGGCCTGGCCTAC	GCTCGCGACGAAACCTGC
HAdV-5 pVI qRT-PCR	AGGCGTCTAACCAGTCACAGTC	CTTGCCAGTTTCCCATGAACGG
HAdV-5 pVII qRT-PCR	CGAGGGACCTGAGCGAGTC	GCCCCAGCCTGTGTTATTGC
HAdV-5 Hexon qRT-PCR		TGTAAGACCACTGCGGCATC
HAdV-5 Fiber qRT-PCR		GAGGACCGGTTTCCGTGTCA
HPRT1 qRT-PCR	TGGACAGGACTGAACGTCTTG	CCAGCAGGTCAGCAAAGAATTTA
ePAT Jänicke., 2012		GCGAGCTCCGCGGCCGCGTTTTTTTTTTTT
TVN-PAT Jänicke., 2012		GCGAGCTCCGCGGCCGCGTTTTTTTTTTTTTVN
ePAT/TVN-PAT Universal Jänicke., 2012		GCGAGCTCCGCGGCCGCGT
ePAT/TVN-PAT HAdV-5 L3 pA	GCAGCCACAGTGCGCAGATTAGGAG	
ePAT/TVN-PAT HAdV-5 L5 pA	CCATTACACTAAACGGTACACAGGA	