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ZNF598 antibody - middle region

Rabbit Polyclonal Antibody
Catalog # AI11314

Product Information

Application	WB
Primary Accession	Q86UK7
Other Accession	NM_178167, NP_835461
Reactivity	Human, Mouse, Rat, Dog, Horse
Predicted	Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	98637

Additional Information

Gene ID	90850
Alias Symbol	DKFZp762F135, FLJ00086
Other Names	Zinc finger protein 598, ZNF598
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-ZNF598 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	ZNF598 antibody - middle region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	ZNF598 {ECO:0000303|PubMed:28132843, ECO:0000312|HGNC:HGNC:28079}
Function	E3 ubiquitin-protein ligase that plays a key role in the ribosome quality control (RQC), a pathway that takes place when a ribosome has stalled during translation, leading to degradation of nascent peptide chains (PubMed:28065601, PubMed:28132843, PubMed:28685749, PubMed:32099016, PubMed:32579943, PubMed:33581075). ZNF598 is activated when ribosomes are stalled within an mRNA following translation of prematurely polyadenylated mRNAs (PubMed:28065601, PubMed:28132843, PubMed:28685749). Acts as a ribosome collision sensor: specifically recognizes and binds collided di-ribosome, which arises when a trailing ribosome encounters a slower leading ribosome, leading to terminally arrest

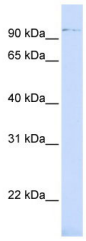
translation (PubMed:28065601, PubMed:28132843, PubMed:28685749, PubMed:30293783). Following binding to colliding ribosomes, mediates monoubiquitination of 40S ribosomal proteins RPS10/eS10 and RPS3/uS3, and 'Lys-63'-linked polyubiquitination of RPS20/uS10 (PubMed:28065601, PubMed:28132843, PubMed:28685749). Polyubiquitination of RPS20/uS10 promotes recruitment of the RQT (ribosome quality control trigger) complex, which drives the disassembly of stalled ribosomes, followed by degradation of nascent peptides (PubMed:32099016, PubMed:32579943, PubMed:36302773). E3 ubiquitin-protein ligase activity is dependent on the E2 ubiquitin-conjugating enzyme UBE2D3 (PubMed:28685749). Also acts as an adapter that recruits the 4EHP-GYF2 complex to mRNAs (PubMed:22751931, PubMed:32726578). Independently of its role in RQC, may also act as a negative regulator of interferon-stimulated gene (ISG) expression (PubMed:29719242).

Cellular Location Cytoplasm, cytosol.

References

Tao,W.A., (2005) Nat. Methods 2 (8), 591-598 Reconstitution and Storage:For short term use, store at 2-8C up to 1 week. For long term storage, store at -20C in small aliquots to prevent freeze-thaw cycles.

Images



WB Suggested Anti-ZNF598 Antibody Titration: 0.2-1 µg/ml
ELISA Titer: 1:62500
Positive Control: 721_B cell lysate

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.