

ZNF598 Rabbit pAb

Catalog # AP99249

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	Q86UK7
Other Accession	Q86UK7
Host	Rabbit
Clonality	Polyclonal
Calculated MW	98637
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human ZNF598
Epitope Specificity	781-904/904
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Similarity : Contains 1 C2H2-type zinc finger. Contains 1 RING-type zinc finger.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Zinc-finger proteins bind nucleic acids and play important roles in various cellular functions, including cell proliferation, differentiation, and apoptosis. This protein and Grb10-interacting GYF protein 2 have been identified as a components of the mammalian 4EHP (m4EHP) complex. The complex is thought to function as a translation repressor in embryonic development. [provided by RefSeq, Oct 2012].

Additional Information

Gene ID	90850
Other Names	HEL2; Ntrap; Znf598; ZN598_HUMAN; Zinc finger protein 598; 2.3.2.27; ZN598_MOUSE; Zfp598; zinc finger protein 598, E3 ubiquitin ligase; Histone E3 Ligase 2 homolog
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:500 0-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	ZNF598 {ECO:0000303 PubMed:28132843, ECO:0000312 HGNC:HGNC:28079}
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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.

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