10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ZCCHC6 Rabbit pAb

ZCCHC6 Rabbit pAb
Catalog # AP57145

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q5VYS8
Reactivity	Mouse
Predicted	Rat, Pig, Human, Rabbit, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	171229
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human ZCCHC6
Epitope Specificity	111-210/1495
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	ZCCHC6 is a 1,495 amino acid uridylyltransferase that mediates RNA uridylation. A member of the DNA polymerase type-B-like family, ZCCHC6 contains three CCHC-type zinc fingers and two PAP-associated domains, and exists as six alternatively spliced isoforms. The gene encoding ZCCHC6 maps to human chromosome 9q21.33 and mouse chromosome 13 B2.

Additional Information

Gene ID	79670
Other Names	Terminal uridylyltransferase 7, TUTase 7, 2.7.7.52, Zinc finger CCHC domain-containing protein 6, TUT7 (HGNC:25817)
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
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	TUT7 (HGNC:25817)
Function	Uridylyltransferase that mediates the terminal uridylation of mRNAs with

short (less than 25 nucleotides) poly(A) tails, hence facilitating global mRNA decay (PubMed:19703396, PubMed:25480299). Essential for both oocyte maturation and fertility. Through 3' terminal uridylation of mRNA, sculpts, with TUT7, the maternal transcriptome by eliminating transcripts during oocyte growth (By similarity). Involved in microRNA (miRNA)-induced gene silencing through uridylation of deadenylated miRNA targets (PubMed:25480299). Also functions as an integral regulator of microRNA biogenesiS using 3 different uridylation mechanisms (PubMed:25979828). Acts as a suppressor of miRNA biogenesis by mediating the terminal uridylation of some miRNA precursors, including that of let-7 (pre-let-7). Uridylated pre-let-7 RNA is not processed by Dicer and undergo degradation. Pre-let-7 uridylation is strongly enhanced in the presence of LIN28A (PubMed:22898984). In the absence of LIN28A, TUT7 and TUT4 monouridylate group II pre-miRNAs, which includes most of pre-let7 members, that shapes an optimal 3' end overhang for efficient processing (PubMed:25979828, PubMed:28671666). Add oligo-U tails to truncated pre-miRNAS with a 5' overhang which may promote rapid degradation of non-functional pre-miRNA species (PubMed:25979828). Does not play a role in replication-dependent histone mRNA degradation (PubMed:18172165). Due to functional redundancy between TUT4 and TUT7, the identification of the specific role of each of these proteins is difficult (PubMed:18172165, PubMed:19703396, PubMed:22898984, PubMed:25480299, PubMed:25979828, PubMed:28671666). TUT4 and TUT7 restrict retrotransposition of long interspersed element-1 (LINE-1) in cooperation with MOV10 counteracting the RNA chaperonne activity of L1RE1. TUT7 uridylates LINE-1 mRNAs in the cytoplasm which inhibits initiation of reverse transcription once in the nucleus, whereas uridylation by TUT4 destabilizes mRNAs in cytoplasmic ribonucleoprotein granules (PubMed:30122351).

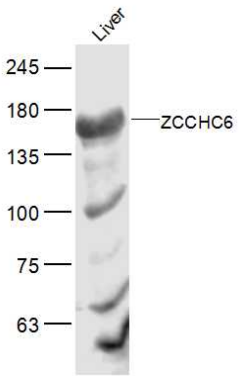
Cellular Location

Cytoplasm. Note=Expression is pancytoplasmic in contrast with TUT4 expression which is enriched in cytoplasmic ribonucleoprotein granules.

Background

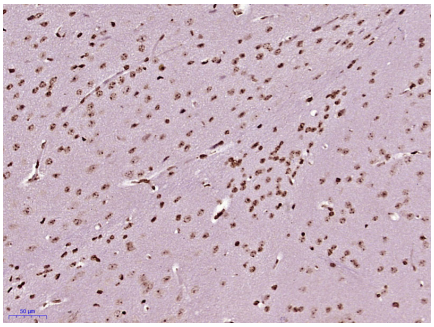
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Images



Sample:
Liver (Mouse) Lysate at 40 ug
Primary: Anti-ZCCHC6 (AP57145) at 1/300 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 171 kD
Observed band size: 171 kD

Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (ZCCHC6) Polyclonal Antibody,



Unconjugated (AP57145) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.

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