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Rabbit Anti-STAU2/APC Conjugated antibody

SL11031R-APC

Product Name	Anti-STAU2/APC
Chinese Name	APC 标记的双链 RNABinding proteinStaufen2 抗体
Alias	Double stranded RNA binding protein Staufen homolog 2; MGC119606; STAU 2; STAU2; STAU-2; Staufen (Drosophila, RNA-binding protein) homolog 2; Staufen homolog 2; Staufen RNA binding protein homolog 2; Staufen, RNA binding protein, homolog 2 (Drosophila); 39K2; 39K3; DKFZp781K0371; STAU2_HUMAN.
Research Area	Neurobiology Cell adhesion molecule Cytoskeleton Epigenetics
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human,Rat(predicted:Mouse,Dog,Horse,Rabbit,Sheep)
Applications	IF=1:100-500 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight	63kDa
Form	Lyophilized or Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human STAU2
Lsotype	IgG
Purification	affinity purified by Protein A
Storage Buffer	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
Product Detail	**background:** Staufen homolog 2 is a member of the family of double-stranded RNA (dsRNA)-binding proteins involved in the transport and/or localization of mRNAs to different subcellular compartments and/or organelles. These proteins are characterized by the presence of multiple dsRNA-binding

domains which are required to bind RNAs having double-stranded secondary structures. Staufen homolog 2 shares 48.5% and 59.9% similarity with drosophila and human staufen, respectively. The exact function of Staufen homolog 2 is not known, but since it contains 3 copies of conserved dsRNA binding domain, it could be involved in double-stranded RNA binding events. Several transcript variants encoding different isoforms have been found for this gene.

Function:
RNA-binding protein required for the microtubule-dependent transport of neuronal RNA from the cell body to the dendrite. As protein synthesis occurs within the dendrite, the localization of specific mRNAs to dendrites may be a prerequisite for neurite outgrowth and plasticity at sites distant from the cell body (By similarity).

Subunit:
Interacts with the exportin XPO5. This requires RNA and RAN bound to GTP. Interacts with microtubules. Isoform 2 and isoform 3 may also interact with ribosomes, and this association is independent of translation (By similarity). Identified in a mRNP complex, at least composed of DHX9, DDX3X, ELAVL1, HNRNPU, IGF2BP1, ILF3, PABPC1, PCBP2, PTBP2, STAU1, STAU2, SYNCRIP and YBX1.

Subcellular Location:
Cytoplasm. Nucleus. Nucleus, nucleolus. Endoplasmic reticulum. Note=Shuttles between the nucleolus, nucleus and the cytoplasm. Nuclear export of isoform 1 is independent of XPO1/CRM1 and requires the exportin XPO5. Nuclear export of isoform 2 and isoform 3 can occur by both XPO1/CRM1-dependent and XPO1/CRM1-independent pathways. Found in large cytoplasmic ribonucleoprotein (RNP) granules which are present in the actin rich regions of myelinating processes and associated with microtubules, polysomes and the endoplasmic reticulum. Also recruited to stress granules (SGs) upon inhibition of translation or oxidative stress. These structures are thought to harbor housekeeping mRNAs when translation is aborted (By similarity).

Similarity:
Contains 4 DRBM (double-stranded RNA-binding) domains.

Database links:

Entrez Gene: 100125233 Cow

Entrez Gene: 477913 Dog

Entrez Gene: 100051157 Horse

Entrez Gene: 27067 Human

Entrez Gene: 29819 Mouse

Entrez Gene: 171500 Rat

Omim: 605920 Human

SwissProt: Q9NUL3 Human

SwissProt: Q8CJ67 Mouse

SwissProt: Q68SB1 Rat

Unigene: 561815 Human

Unigene: 216257 Mouse

Unigene: 73714 Rat

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