

# Rabbit Anti-STAU2 antibody

## SL11031R

<b>Product Name:</b>	STAU2
Chinese Name:	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.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Horse, Rabbit, Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	63kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human STAU2:161-260/570
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% 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 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	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.

#### **SWISS:**

O9NUL3

#### Gene ID:

27067

#### 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

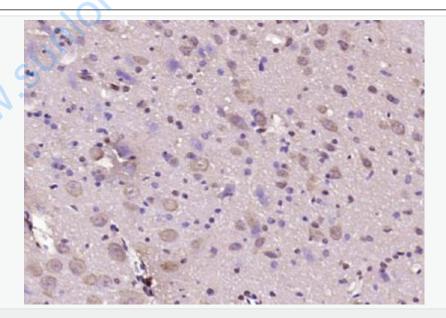
Unigene: 561815 Human

Unigene: 216257 Mouse

Unigene: 73714 Rat

### **Important Note:**

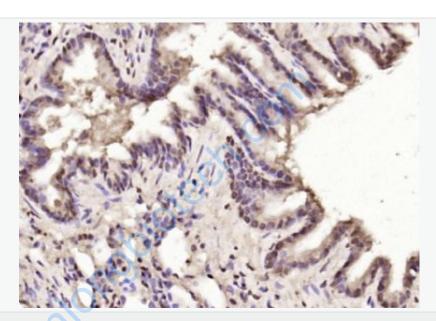
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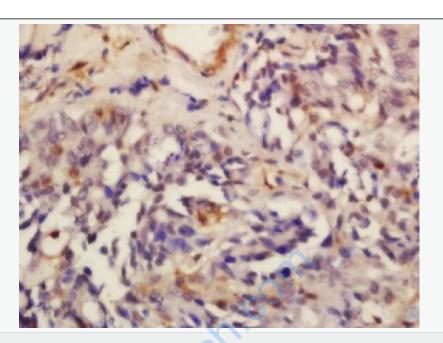
#### Picture:

Paraformaldehyde-fixed, paraffin embedded (rat 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 (STAU2) Polyclonal Antibody, Unconjugated (SL11031R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (rat lung); 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 (STAU2) Polyclonal Antibody, Unconjugated (SL11031R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Tissue/cell: human gastric carcinoma; 4% Paraformaldehyde-fixed and paraffinembedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min;

Incubation: Anti-STAU2 Polyclonal Antibody, Unconjugated(SL11031R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining