

Product Name: KD-Validated STAU1 Recombinant Rabbit Monoclonal Antibody**Catalog #: KVA00722**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC,IHC-P
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:100-1:200
Molecular Weight	Calculated MW: 63.2kDa

Antigen Information

Gene Name	STAU1 STAU1; Staufen Double-Stranded RNA Binding Protein 1; PPP1R150; STAU; Double-Stranded RNA-Binding Protein Staufen Homolog 1; Protein Phosphatase 1, Regulatory Subunit 150;
Alternative Names	Staufen, RNA Binding Protein, Homolog 1 (Drosophila); Staufen (Drosophila, RNA-Binding Protein); Staufen, RNA Binding Protein (Drosophila); Staufen, RNA Binding Protein, Homolog 1
Gene ID	6780.0
SwissProt ID	O95793
Immunogen	A synthesized peptide derived from human Staufen

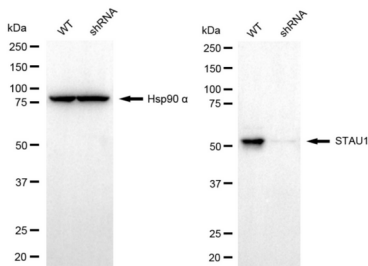
Background

Staufen 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. The human homologue of staufen encoded by STAU, in addition contains a microtubule-binding domain similar to that of microtubule-associated protein 1B, and binds tubulin. The STAU gene product has been shown to be present in the cytoplasm in association with the rough endoplasmic reticulum (RER), implicating this protein in the transport of mRNA via the microtubule network to the RER, the site of translation. [provided by RefSeq, Apr 2020]

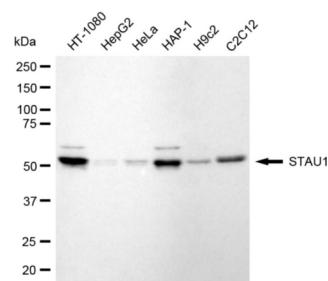
Research Area

Signal Transduction, Neuroscience

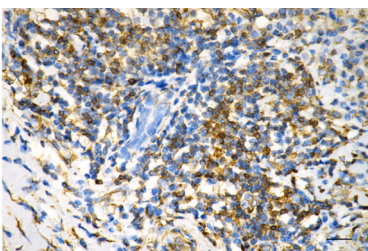
Image Data



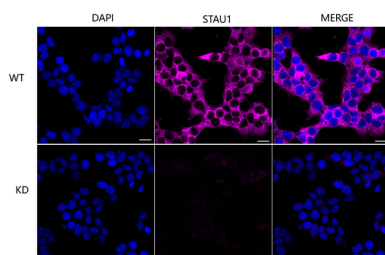
Western blotting analysis using STAU1 antibody (KVA00722). STAU1 expression in wild type (WT) and STAU1 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with STAU1 antibody (KVA00722, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



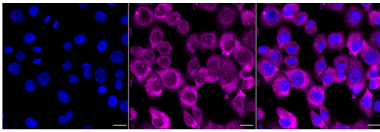
Western blotting analysis using STAU1 antibody (KVA00722). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with STAU1 antibody (KVA00722, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively. STAU1, staufen double-stranded RNA binding protein 1.



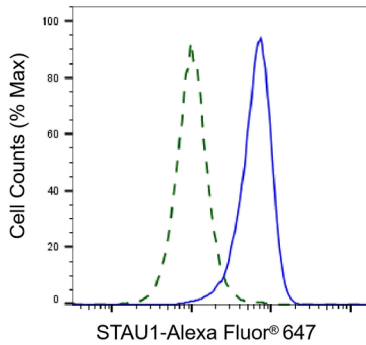
Immunohistochemistry was performed on paraffin-embedded human breast carcinoma using STAU1 antibody (KVA00722, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



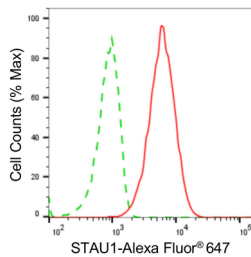
Immunocytochemical staining of HeLa cells using STAU1 antibody (KVA00722, 1:1,000), Top panel: wild-type (WT); Bottom panel: STAU1 shRNA knockdown (KD). Nuclei were stained blue with DAPI; STAU1 was stained magenta with Alexa Fluor® 647. Scale bar, 20 µm. Permeabilization: Triton.



Immunocytochemical staining of HT-1080 cells with STAU1 antibody(KVAb00722, 1:1,000) . Nuclei were stained blue with DAPI; STAU1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 μ m.



Validation of STAU1 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with STAU1 antibody (KVAb00722, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of STAU1 expression in HT-1080 cells using STAU1 antibody (KVAb00722, 1:2,000). Green, isotype control; red, STAU1.