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Datasheet for 600-401-EV4

STAU1 Antibody

Overview

Description:	Anti-STAU1 (RABBIT) Antibody - 600-401-EV4
Item No.:	600-401-EV4
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	STAU1 is a member of a 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 STAU1 also contains a microtubule- binding domain similar to that of microtubule-associated protein 1B, and binds tubulin. STAU1 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. STAU1 is also known to interact with influenza ribonucleoproteins NS1, NP, and PA and is required for efficient viral replication.
Synonyms:	STAU1 Antibody, STAU, STAU, Double-stranded RNA-binding protein Staufen homolog 1
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	STAU1
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-STAU1 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 15 amino acid synthetic peptide near the C-terminus of human STAU1.

Purity/Specificity:	Anti-STAU1 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with STAU1 from other sources has not been determined.
Relevant Links:	• UniProtKB - O95793 • GeneID - 6780 • NCBI - NP_001032405.1

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-STAU1 Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 63 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000 - 1:20,000
IF:	20 µg/mL
IHC:	10 µg/mL
WB:	1-2 µg/mL

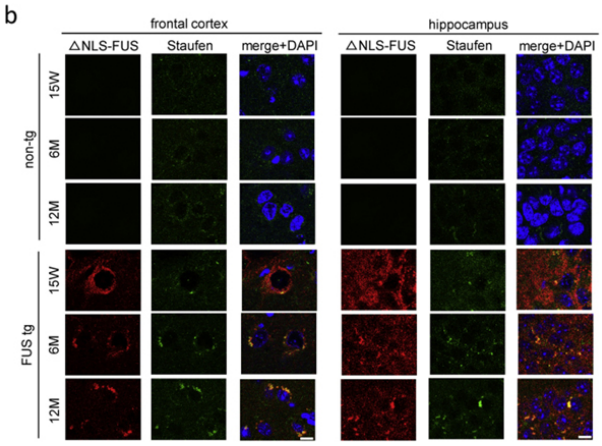
Formulation

Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

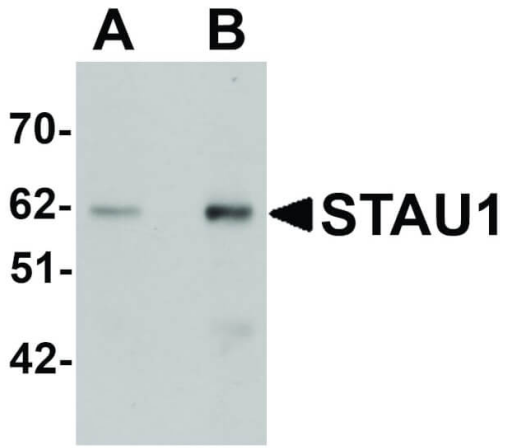
Shipping Condition:	Wet Ice
Storage Condition:	Antibody can be stored at 4°C up to one year. Antibodies should not be exposed to prolonged high temperatures.
Expiration:	Expiration date is one (1) year from date of receipt.

Images

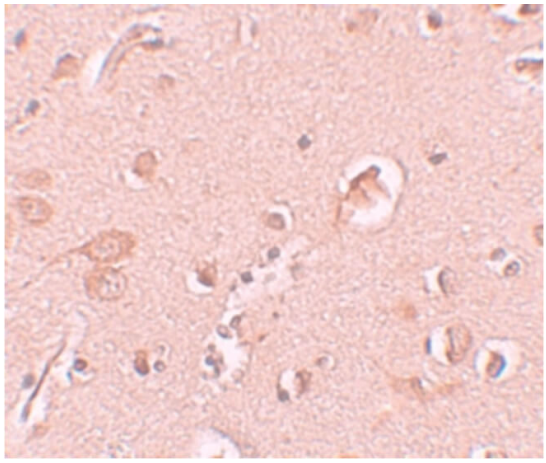


Immunofluorescence Microscopy
Ribonucleic acid transporters were colocalized with the cytoplasmic FUS aggregates.

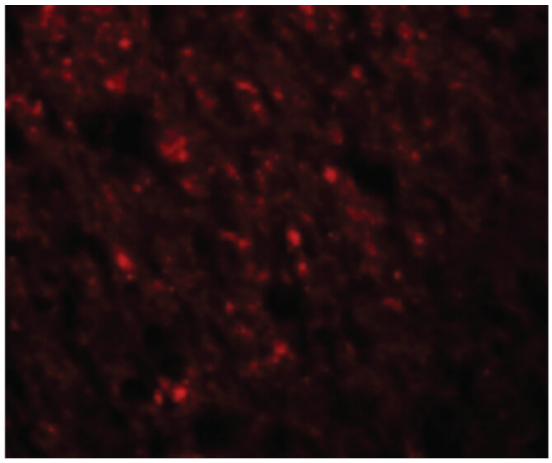
(b) Frontal cortex and hippocampus from FUS transgenic and non-tg mice at each age were stained with anti-Myc (red) and Staufen (green; b). Sections were counterstained with DAPI. Note that cytoplasmic FUS aggregates recruit both FMRP and Staufen in an age-dependent manner. Scale bar, 10 µm. Fig 6. PMID: 28928015



Western Blot
Western Blot of STAU1 antibody. Lane 1: Rat brain tissue lysate with STAU1 antibody at 1 µg/mL. Lane 1: Rat brain tissue lysate with STAU1 antibody at 2 µg/mL. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 63 kDa, 62 kDa for STAU1. Other band(s): STAU1 splice variants and isoforms.



Immunohistochemistry
Immunohistochemistry of STAU1 antibody. Tissue: Human brain tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: STAU1 antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: STAU1 is cytoplasmic and secreted into the extracellular space. Staining: STAU1 as precipitated pink signal with blue nuclear counterstain.



Immunofluorescence Microscopy
Immunofluorescence Microscopy of STAU1 antibody. Tissue: Human brain cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: STAU1 antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: STAU1 is cytoplasmic and secreted into the extracellular space. Staining: STAU1 as red fluorescent signal.

References

- Shiihashi et al. Dendritic Homeostasis Disruption in a Novel Frontotemporal Dementia Mouse Model Expressing Cytoplasmic Fused in Sarcoma. *EBioMedicine* (2017)

Disclaimer

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