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# STAU1 Antibody

Catalog # ASC11213

## Product Information

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| **Application** | WB, IF, E, IHC-P |
| **Primary Accession** | O95793 |
| **Other Accession** | NP_059347, 82659087 |
| **Reactivity** | Human, Mouse, Rat |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | IgG |
| **Calculated MW** | 63182 |
| **Concentration (mg/ml)** | 1 mg/mL |
| **Conjugate** | Unconjugated |
| **Application Notes** | STAU1 antibody can be used for detection of STAU1 by Western blot at 1 - 2 g/mL. Antibody can also be used for immunohistochemistry starting at 10 g/mL. For immunofluorescence start at 20 g/mL. |

## Additional Information

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| **Gene ID** | 6780 |
| **Other Names** | Double-stranded RNA-binding protein Staufen homolog 1, STAU1, STAU |
| **Target/Specificity** | STAU1; |
| **Reconstitution & Storage** | STAU1 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures. |
| **Precautions** | STAU1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | STAU1 |
| **Synonyms** | STAU |
| **Function** | Binds double-stranded RNA (regardless of the sequence) and tubulin. May play a role in specific positioning of mRNAs at given sites in the cell by cross-linking cytoskeletal and RNA components, and in stimulating their translation at the site. |
| **Cellular Location** | Cytoplasm. Rough endoplasmic reticulum. Note=Localizes exclusively with the rough endoplasmic reticulum (RER) |

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| **Tissue Location** | Widely expressed. Expressed in brain, pancreas, heart, skeletal muscles, liver, lung, kidney and placenta |

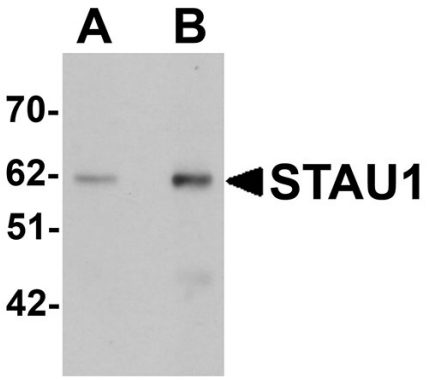
## Background

STAU1 Antibody: 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.

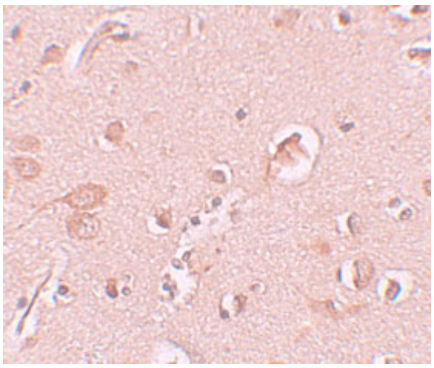
## References

Marion RM, Fortes P, Peloso A, et al. A human sequence homologue of Staufen is an RNA-binding protein that is associated with polysomes and localizes to the rough endoplasmic reticulum. Mol. Cell. Biol.1999; 19:2212-9.
de Lucas S, Peredo J, Marion RM, et al. Human Staufen1 protein interacts with influenza virus nucleoproteins and is required for efficient virus multiplication. J. Virol.2010; 84:7603-12.

## Images

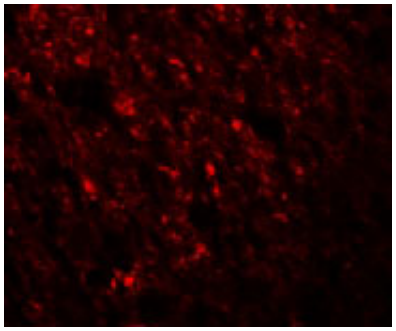



Western blot analysis of STAU1 in rat brain tissue lysate with STAU1 antibody at (A) 1 and (B) 2 µg/mL.



Immunohistochemistry of STAU1 in human brain tissue with STAU1 antibody at 10 µg/mL.

Immunofluorescence of STAU1 in Human Brain cells with STAU1 antibody at 20 µg/mL.



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