SANTA CRUZ BIOTECHNOLOGY, INC.

STAU1 (C-14): sc-86883

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

STAU1 (staufen, RNA binding protein, homolog 1) is a 577 amino acid protein that contains three double-stranded RNA-binding domains and is a mammalian homolog of Staufen, a *Drosophila* protein that is involved in mRNA transport during oogenesis and zygotic development. Localized to the rough endoplasmic reticulum (RER) and expressed in a variety of tissues, including heart, brain, liver, lung, pancreas, kidney and placenta, STAU1 binds to both tubulin and double-stranded RNA and is thought to play an important role in mRNA transport from the microtubule network to the RER. Additionally, STAU1 may be involved in cross-linking cytoskeletal components with RNA, an event that is important for proper mRNA positioning during translation. Alternative splicing of the STAU1 gene yields two STAU1 isoforms, designated short and long.

CHROMOSOMAL LOCATION

Genetic locus: STAU1 (human) mapping to 20q13.13; Stau1 (mouse) mapping to 2 H3.

SOURCE

STAU1 (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of STAU1 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-86883 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

STAU1 (C-14) is recommended for detection of STAU1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with STAU2.

STAU1 (C-14) is also recommended for detection of STAU1 in additional species, including porcine, equine and avian.

Suitable for use as control antibody for STAU1 siRNA (h): sc-76586, STAU1 siRNA (m): sc-153881, STAU1 shRNA Plasmid (h): sc-76586-SH, STAU1 shRNA Plasmid (m): sc-153881-SH, STAU1 shRNA (h) Lentiviral Particles: sc-76586-V and STAU1 shRNA (m) Lentiviral Particles: sc-153881-V.

Molecular Weight of STAU1 long isoform: 63 kDa.

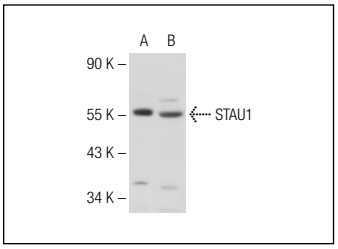
Molecular Weight of STAU1 short isoform: 55 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, Jurkat whole cell lysate: sc-2204 or Hep G2 cell lysate: sc-2227.

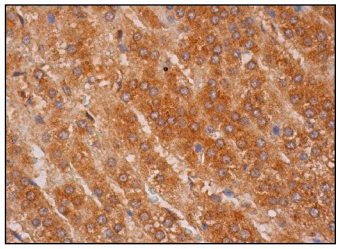
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



STAU1 (C-14): sc-86883. Western blot analysis of STAU1 expression in K-562 (**A**) and Jurkat (**B**) whole cell lysates.



STAU1 (C-14): sc-86883. Immunoperoxidase staining of formalin fixed, paraffin-embedded human adrenal gland tissue showing cytoplasmic staining of glandular cells.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS Satisfaction Guaranteed

Try **STAU1 (D-5): sc-376123** or **STAU1 (H-11): sc-390992**, our highly recommended monoclonal alternatives to STAU1 (C-14).