SANTA CRUZ BIOTECHNOLOGY, INC.

XTRP3 (C-11): sc-515119

BACKGROUND

The solute carrier (SLC6) family, also known as the neurotransmitter transporter family, is one of the largest transporter families in the human genome comprising 20 members. The sodium- and chloride-dependent transporter XTRP3, also designated neurotransmitter transporter rB21A homolog is expressed in the medullary layer of the brain, as well as in the kidney, lung, and small intestinal tissues. XTRP3 is a 616-amino acid membrane protein that contains 12 putative transmembrane domains and several glycosylation sites that may play a role in regulating cerebrospinal fluid (CSF) levels of its substrate. XTRP3 may be a candidate for transporter-based therapeutic agents aiding in neurological and psychiatric disorders.

REFERENCES

1. Smith, K.E., et al. 1995. Molecular cloning of an orphan transporter. A new member of the neurotransmitter transporter family. FEBS Lett. 357: 86-92.
2. Kiss, H., et al. 2002. Comparative human/murine sequence analysis of the common eliminated region 1 from human 3p21.3. Mamm. Genome 13: 646-655.
3. Kowalczuk, S., et al. 2005. Molecular cloning of the mouse IMINO system: an Na^+- and Cl^--dependent proline transporter. Biochem. J. 386: 417-422.
4. Takanaga, H., et al. 2005. Identification of mammalian proline transporter SIT1 (SLC6A20) with characteristics of classical system imino. J. Biol. Chem. 280: 8974-8984.
5. Bröer, S. 2006. The SLC6 orphans are forming a family of amino acid transporters. Neurochem. Int. 48: 559-567.
6. Broer, A., et al. 2006. The molecular basis of neutral aminoacidurias. Pflugers Arch. 451: 511-517.

CHROMOSOMAL LOCATION

Genetic locus: SLC6A20 (human) mapping to 3p21.31.

SOURCE

XTRP3 (C-11) is a mouse monoclonal antibody raised against amino acids 301-373 mapping within an extracellular domain of XTRP3 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

XTRP3 (C-11) is available conjugated to agarose (sc-515119 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-515119 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515119 PE), fluorescein (sc-515119 FITC), Alexa Fluor® 488 (sc-515119 AF488), Alexa Fluor® 546 (sc-515119 AF546), Alexa Fluor® 594 (sc-515119 AF594) or Alexa Fluor® 647 (sc-515119 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515119 AF680) or Alexa Fluor® 790 (sc-515119 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

XTRP3 (C-11) is recommended for detection of XTRP3 of human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for XTRP3 siRNA (h): sc-61815, XTRP3 shRNA Plasmid (h): sc-61815-SH and XTRP3 shRNA (h) Lentiviral Particles: sc-61815-V.

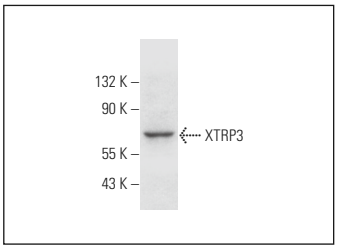
Molecular Weight of XTRP3: 66 kDa.

Positive Controls: CCRF-CEM cell lysate: sc-2225.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



XTRP3 (C-11): sc-515119. Western blot analysis of XTRP3 expression in CCRF-CEM whole cell lysate.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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