

# XTRP2 (U-19): sc-102160

## BACKGROUND

The solute carrier (SLC) family, also known as the neurotransmitter transporter family, is one of the largest transporter families in the human genome. The SLC6 subgroup, which includes the dopamine transporter (DAT), the serotonin transporter (SERT) and the norepinephrine transporter (NET), contains sodium/chloride dependent, high-affinity plasma transport proteins. Sodium/chloride-dependent transporter XTRP2, also known as solute carrier family 6 member 18 (SLC6A18), is a 628 amino acid member of the SLC family. XTRP2 is composed of 12 exons, 11 introns and 8 tandem repeats. Highly expressed in the kidney, SLC6A18 is classified as an orphan transporter.

## REFERENCES

- Nash, S.R., Giros, B., Kingsmore, S.F., Kim, K.M., el-Mestikawy, S., Dong, Q., Fumagalli, F., Seldin, M.F. and Caron, M.G. 1998. Cloning, gene structure and genomic localization of an orphan transporter from mouse kidney with six alternatively-spliced isoforms. *Recept. Channels* 6: 113-128.
- Quan, H., Athirakul, K., Wetsel, W.C., Torres, G.E., Stevens, R., Chen, Y.T., Coffman, T.M. and Caron, M.G. 2004. Hypertension and impaired glycine handling in mice lacking the orphan transporter XT2. *Mol. Cell. Biol.* 24: 4166-4173.
- Höglund, P.J., Adzic, D., Scicluna, S.J., Lindblom, J. and Fredriksson, R. 2005. The repertoire of solute carriers of family 6: identification of new human and rodent genes. *Biochem. Biophys. Res. Commun.* 336: 175-189.
- Romeo, E., Dave, M.H., Bacic, D., Ristic, Z., Camargo, S.M., Loffing, J., Wagner, C.A. and Verrey, F. 2006. Luminal kidney and intestine SLC6 amino acid transporters of BOAT-cluster and their tissue distribution in *Mus musculus*. *Am. J. Physiol. Renal Physiol.* 290: F376-F383.
- Eslami, B., Kinboshi, M., Inoue, S., Harada, K., Inoue, K. and Koizumi, A. 2006. A nonsense polymorphism (Y319X) of the solute carrier family 6 member 18 (SLC6A18) gene is not associated with hypertension and blood pressure in Japanese. *Tohoku J. Exp. Med.* 208: 25-31.
- Kim, C.H., Waldman, I.D., Blakely, R.D. and Kim, K.S. 2008. Functional gene variation in the human norepinephrine transporter: association with attention deficit hyperactivity disorder. *Ann. N.Y. Acad. Sci.* 1129: 256-260.
- Yoon, Y.H., Seol, S.Y., Heo, J., Chung, C.N., Park, I.H. and Leem, S.H. 2008. Analysis of VNTRs in the solute carrier family 6, member 18 (SLC6A18) and lack of association with hypertension. *DNA Cell Biol.* 27: 559-567.

## CHROMOSOMAL LOCATION

Genetic locus: SLC6A18 (human) mapping to 5p15.33; Slc6a18 (mouse) mapping to 13 C1.

## SOURCE

XTRP2 (U-19) is a purified rabbit polyclonal antibody raised against XTRP2 of human origin.

## STORAGE

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

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

## APPLICATIONS

XTRP2 (U-19) is recommended for detection of XTRP2 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), immunohistochemistry (including paraffin-embedded sections) (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 XTRP2 siRNA (h): sc-91883, XTRP2 siRNA (m): sc-155396, XTRP2 shRNA Plasmid (h): sc-91883-SH, XTRP2 shRNA Plasmid (m): sc-155396-SH, XTRP2 shRNA (h) Lentiviral Particles: sc-91883-V and XTRP2 shRNA (m) Lentiviral Particles: sc-155396-V.

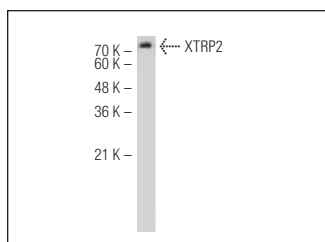
Molecular Weight of XTRP2: 71 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or XTRP2 (h): 293T Lysate: sc-115985.

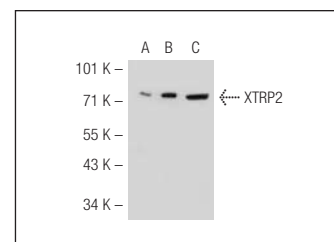
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

## DATA



XTRP2 (U-19): sc-102160. Western blot analysis of XTRP2 expression in Jurkat whole cell lysate.



XTRP2 (U-19): sc-102160. Western blot analysis of XTRP2 expression in non-transfected 293T: sc-117752 (A), human XTRP2 transfected 293T: sc-115985 (B) and Jurkat (C) whole cell lysate.

## RESEARCH USE

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