

# XTRP2 (E-12): sc-132139

## 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: 376-383.
- 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.

## 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.

## SOURCE

XTRP2 (E-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of XTRP2 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-132139 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

XTRP2 (E-12) 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), 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 XTRP3.

XTRP2 (E-12) is also recommended for detection of XTRP2 in additional species, including equine, canine and porcine.

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.

## 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) 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.