

SRPX2 (K-17): sc-244227

BACKGROUND

SRPX2 (sushi-repeat-containing protein, X-linked 2), also known as BPP, CBPS, PMGX, RESDX or SRPUL, is a 465 amino acid secreted protein expressed in neurons of the brain, including the rolandic area. It has been suggested that SRPX2 enhances cell motility, migration and adhesion through FAK signaling in gastric and other cancer cells. Localized to the cytoplasm, SRPX2 is a ligand for uPAR (urokinase plasminogen activator), a receptor that is a crucial component of the extracellular plasminogen proteolysis system. SRPX2 may be responsible for rolandic seizures (RSs) associated with oral and speech dyspraxia and mental retardation (MR). The involvement of SRPX2 in these disorders suggests an important role for SRPX2 in the perisylvian region critical for language and cognitive development.

REFERENCES

1. Roll, P., et al. 2006. SRPX2 mutations in disorders of language cortex and cognition. *Hum. Mol. Genet.* 15: 1195-1207.
2. Royer, B., et al. 2007. Molecular evolution of the human SRPX2 gene that causes brain disorders of the Rolandic and Sylvian speech areas. *BMC Genet.* 8: 72.
3. Michelucci, R., et al. 2008. Familial epilepsy and developmental dysphasia: description of an Italian pedigree with autosomal dominant inheritance and screening of candidate loci. *Epilepsy Res.* 80: 9-17.
4. Royer-Zemmour, B., et al. 2008. Epileptic and developmental disorders of the speech cortex: ligand/receptor interaction of wild-type and mutant SRPX2 with the plasminogen activator receptor uPAR. *Hum. Mol. Genet.* 17: 3617-3630.
5. Bahi-Buisson, N., et al. 2008. Epileptogenic brain malformations: radiological and clinical presentation and indications for genetic testing. *Rev. Neurol.* 164: 995-1009.
6. Rudolf, G., et al. 2009. From rolandic epilepsy to continuous spike-and-waves during sleep and Landau-Kleffner syndromes: insights into possible genetic factors. *Epilepsia* 50: 25-28.
7. Miljkovic-Licina, M., et al. 2009. Sushi repeat protein X-linked 2, a novel mediator of angiogenesis. *FASEB J.* 23: 4105-4116.
8. Tanaka, K., et al. 2009. SRPX2 is overexpressed in gastric cancer and promotes cellular migration and adhesion. *Int. J. Cancer* 124: 1072-1080.
9. Guerrini, R., et al. 2009. Neuronal migration disorders. *Neurobiol. Dis.* 38: 154-166.

CHROMOSOMAL LOCATION

Genetic locus: SRPX2 (human) mapping to Xq22.1; SrpX2 (mouse) mapping to X E3.

SOURCE

SRPX2 (K-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of SRPX2 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-244227 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

SRPX2 (K-17) is recommended for detection of SRPX2 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).

SRPX2 (K-17) is also recommended for detection of SRPX2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for SRPX2 siRNA (h): sc-91299, SRPX2 siRNA (m): sc-153829, SRPX2 shRNA Plasmid (h): sc-91299-SH, SRPX2 shRNA Plasmid (m): sc-153829-SH, SRPX2 shRNA (h) Lentiviral Particles: sc-91299-V and SRPX2 shRNA (m) Lentiviral Particles: sc-153829-V.

Molecular Weight of SRPX2: 77 kDa.

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.

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 or our catalog for detailed protocols and support products.