

VSX1 (P-14): sc-22549

BACKGROUND

Like other 'paired-like' homeodomain family members, the visual system homeobox gene 1 (VSX1) is instrumental in craniofacial and ocular development; VSX1 plays a distinct role in retinal development. Also known as RINX (retinal inner nuclear layer homeobox), the VSX1 gene is expressed in embryonic craniofacial structures and in the adult retina. VSX1 is abundantly expressed in the inner nuclear layer (INL) of the retina. In mice, *Vsx1* is first detected in the bipolar cells of the retina five days postnatal. The VSX1 gene is also expressed in WERI, a retinoblastoma cell line that expresses retinal cone genes. The human VSX1 gene maps to chromosome 20p11.21 and encodes a 365 amino acid protein with five known splice variants. VSX1 mutations are implicated in two distinct corneal dystrophies, posterior polymorphous dystrophy (PPD) and keratoconus.

CHROMOSOMAL LOCATION

Genetic locus: VSX1 (human) mapping to 20p11.21; *Vsx1* (mouse) mapping to 2 G3.

SOURCE

VSX1 (P-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of VSX1 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-22549 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

VSX1 (P-14) is recommended for detection of VSX1 L1 isoform 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).

VSX1 (P-14) is also recommended for detection of VSX1 L1 isoform in additional species, including canine.

Suitable for use as control antibody for VSX1 siRNA (h): sc-38806, VSX1 siRNA (m): sc-38807, VSX1 shRNA Plasmid (h): sc-38806-SH, VSX1 shRNA Plasmid (m): sc-38807-SH, VSX1 shRNA (h) Lentiviral Particles: sc-38806-V and VSX1 shRNA (m) Lentiviral Particles: sc-38807-V.

Molecular Weight of VRK1 isoforms L1/S1/S2/S3: 38/25/39/14 kDa.

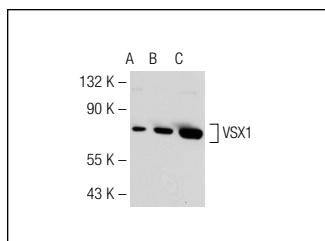
Molecular Weight of VRK1 isoforms 5/6/7/8: 30/23/25/32 kDa.

Positive Controls: VSX1 (m): 293T Lysate: sc-127778 or 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) 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



VSX1 (P-14): sc-22549. Western blot analysis of VSX1 expression in non-transfected 293T: sc-117752 (A), mouse VSX1 transfected 293T: sc-127778 (B) and Jurkat (C) whole cell lysates.

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.



Try **VSX1 (G-11): sc-393699**, our highly recommended monoclonal alternative to VSX1 (P-14).