

VSX1 (P-25): sc-134150

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* 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 5 known splice variants. VSX1 mutations are implicated in two distinct corneal dystrophies, posterior polymorphous dystrophy (PPD) and keratoconus.

REFERENCES

1. Semina, E.V., et al. 2000. Isolation and characterization of a novel human paired-like homeodomain-containing transcription factor gene, VSX1, expressed in ocular tissues. *Genomics* 63: 289-293.
2. Hayashi, T., et al. 2000. RINX(VSX1), a novel homeobox gene expressed in the inner nuclear layer of the adult retina. *Genomics* 67: 128-139.
3. Chow, R.L., et al. 2001. *Vsx1*, a rapidly evolving paired-like homeobox gene expressed in cone bipolar cells. *Mech. Dev.* 109: 315-322.

CHROMOSOMAL LOCATION

Genetic locus: VSX1 (human) mapping to 20p11.21.

SOURCE

VSX1 (P-25) is a Protein A purified rabbit polyclonal antibody raised against synthetic VSX1 peptide of human origin.

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

VSX1 (P-25) is recommended for detection of VSX1 of 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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

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

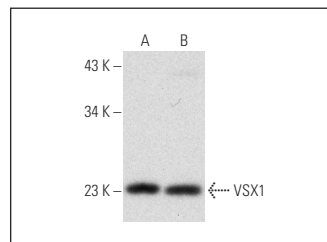
Molecular Weight of VRK1 isoforms 5/6/7/8: 30/23/25/32 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204 or K-562 whole cell lysate: sc-2203.

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).

DATA



VSX1 (P-25): sc-134150. Western blot analysis of VSX1 expression in Jurkat (A) and K-562 (B) whole cell lysates.

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.

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Satisfaction
Guaranteed

Try **VSX1 (G-11): sc-393699**, our highly recommended monoclonal alternative to VSX1 (P-25).