PVRIG (N-14): sc-248326



The Power to Question

BACKGROUND

PVRIG (poliovirus receptor related immunoglobulin domain containing) is a 326 amino acid multi-pass membrane protein. Despite its name, PVRIG does not share sequence similarity with the poliovirus receptor (CD155) and does not contain any immunoglobulin domain. The PVRIG gene is conserved in chimpanzee, canine and bovine, and maps to human chromosome 7q22.1. Chro-mosome 7 is about 158 milllion bases long, encodes over 1,000 genes and makes up about 5% of the human genome. Chromosome 7 has been linked to osteogenesis imperfecta, Pendred syndrome, lissencephaly, citrullinemia and Shwachman-Diamond syndrome. The deletion of a portion of the q arm of chromosome 7 is associated with Williams-Beuren syndrome, a condition characterized by mild mental retardation, an unusual comfort and friendliness with strangers and an elfin appearance. Deletions of portions of the q arm of chromosome 7 are also seen in a number of myeloid disorders including cases of acute myelogenous leukemia and myelodysplasia.

REFERENCES

- 1. Tsipouras, P., et al. 1983. Restriction fragment length polymorphism associated with the pro α 2(I) gene of human type I procollagen. Application to a family with an autosomal dominant form of osteogenesis imperfecta. J. Clin. Invest. 72: 1262-1267.
- Liang, H., et al. 1998. Molecular anatomy of chromosome 7q deletions in myeloid neoplasms: evidence for multiple critical loci. Proc. Natl. Acad. Sci. USA 95: 3781-3785.
- Hillier, L.W., et al. 2003. The DNA sequence of human chromosome 7.
 Nature 424: 157-164.
- Eckert, M.A., et al. 2006. The neurobiology of Williams syndrome: cascading influences of visual system impairment? Cell. Mol. Life Sci. 63: 1867-1875.
- Osborne, L.R., et al. 2006. Williams-Beuren syndrome diagnosis using fluorescence in situ hybridization. Methods Mol. Med. 126: 113-128.
- 6. Reiner, O., et al. 2006. Lissencephaly 1 linking to multiple diseases: mental retardation, neurodegeneration, schizophrenia, male sterility, and more. Neuromolecular Med. 8: 547-565.
- Wilson, M.D., et al. 2006. Comparative analysis of the paired immunoglobulin-like receptor (PILR) locus in six mammalian genomes: duplication, conversion, and the birth of new genes. Physiol. Genomics 27: 201-218.
- 8. Shimamura, A. 2006. Shwachman-Diamond syndrome. Semin. Hematol. 43: 178-188.
- 9. Brezinová, J., et al. 2007. Structural aberrations of chromosome 7 revealed by a combination of molecular cytogenetic techniques in myeloid malignancies. Cancer Genet. Cytogenet. 173: 10-16.

CHROMOSOMAL LOCATION

Genetic locus: PVRIG (human) mapping to 7g22.1.

SOURCE

PVRIG (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of PVRIG 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-248326 P, ($100 \mu g$ peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PVRIG (N-14) is recommended for detection of PVRIG of 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).

Suitable for use as control antibody for PVRIG siRNA (h): sc-89650, PVRIG shRNA Plasmid (h): sc-89650-SH and PVRIG shRNA (h) Lentiviral Particles: sc-89650-V.

Molecular Weight of PVRIG: 34 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) 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.

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