

ARMCX4 (V-14): sc-131116

BACKGROUND

ARMCX4 (armadillo repeat containing, X-linked 4) is a 360 amino acid single-pass membrane protein that exists as two alternatively spliced isoforms and is encoded by a gene that maps to human chromosome Xq22.1. Chromosome X consists of nearly 153 million base pairs encoding approximately 1,000 genes. More than one copy of the X chromosome with a Y chromosome causes Klinefelter's syndrome. A single copy of X alone leads to Turner's syndrome. More than 2 copies of the X chromosome, in the absence of a Y chromosome, is known as Triple X syndrome. Color blindness, hemophilia and Duchenne muscular dystrophy are X chromosome-linked conditions that affect males more frequently because males carry a single X chromosome.

REFERENCES

- Givens, J.R., et al. 1975. Features of Turner's syndrome in women with polycystic ovaries. *Obstet. Gynecol.* 45: 619-624.
- Bernardino-Sgheri, J., et al. 2002. Overall DNA methylation and chromatin structure of normal and abnormal X chromosomes. *Cytogenet. Genome Res.* 99: 85-91.
- Muntoni, F., et al. 2003. Dystrophin and mutations: one gene, several proteins, multiple phenotypes. *Lancet Neurol.* 2: 731-740.
- Deeb, S.S. 2005. The molecular basis of variation in human color vision. *Clin. Genet.* 67: 369-377.
- Bojesen, A., et al. 2006. The metabolic syndrome is frequent in Klinefelter's syndrome and is associated with abdominal obesity and hypogonadism. *Diabetes Care* 29: 1591-1598.
- Hayashi, T., et al. 2006. Novel form of a single X-linked visual pigment gene in a unique dichromatic color-vision defect. *Vis. Neurosci.* 23: 411-417.
- Rolle, U., et al. 2007. Duodenal atresia in an infant with triple-X syndrome: a new associated malformation in 47,XXX. *Birth Defects Res. Part A Clin. Mol. Teratol.* 79: 612-613.
- Moran, L.B., et al. 2008. Towards a pathway definition of Parkinson's disease: a complex disorder with links to cancer, diabetes and inflammation. *Neurogenetics* 9: 1-13.
- Abu-Helo, A., et al. 2010. Identification and biological significance of G protein-coupled receptor associated sorting proteins (GASPs). *Pharmacol. Ther.* 126: 244-250.

CHROMOSOMAL LOCATION

Genetic locus: ARM CX4 (human) mapping to Xq22.1.

SOURCE

ARM CX4 (V-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ARM CX4 of human origin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

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-131116 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ARM CX4 (V-14) is recommended for detection of ARM CX4 isoforms 1 and 2 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); non cross-reactive with other ARM C family members.

Suitable for use as control antibody for ARM CX4 siRNA (h): sc-91366, ARM CX4 shRNA Plasmid (h): sc-91366-SH and ARM CX4 shRNA (h) Lentiviral Particles: sc-91366-V.

Molecular Weight of ARM CX4 isoform 1: 40 kDa.

Molecular Weight of ARM CX4 isoform 2: 38 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.

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.