

# VSTM5 (S-14): sc-247632

## BACKGROUND

VSTM5 (V-set and transmembrane domain containing 5), also known as C11orf90, is a 200 amino acid single-pass type I membrane protein that contains one Ig-like C2-type (immunoglobulin-like) domain. The gene encoding VSTM5 is located on human chromosome 11q21. Chromosome 11 comprises approximately 4% of human genomic DNA and is considered a gene and disease association dense chromosome. The chromosome 11 encoded Atm gene is important for regulation of cell cycle arrest and apoptosis following double strand DNA breaks. Atm mutation leads to the disorder known as ataxia-telangiectasia. The blood disorders Sick cell anemia and thalassemia are caused by HBB gene mutations, while Wilms' tumors, WAGR syndrome and Denys-Drash syndrome are associated with mutations of the WT1 gene. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are also associated with defects in chromosome 11-encoded genes.

## REFERENCES

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- Bhuiyan, Z.A., et al. 2008. An intronic mutation leading to incomplete skipping of exon-2 in KCNQ1 rescues hearing in Jervell and Lange-Nielsen syndrome. *Prog. Biophys. Mol. Biol.* 98: 319-327.
- Coldren, C.D., et al. 2009. Chromosomal microarray mapping suggests a role for BSX and Neurogranin in neurocognitive and behavioral defects in the 11q terminal deletion disorder (Jacobsen syndrome). *Neurogenetics* 10: 89-95.

## CHROMOSOMAL LOCATION

Genetic locus: VSTM5 (human) mapping to 11q21; 2200002K05Rik (mouse) mapping to 9 A2.

## SOURCE

VSTM5 (S-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of VSTM5 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-247632 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

VSTM5 (S-14) is recommended for detection of VSTM5 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).

VSTM5 (S-14) is also recommended for detection of VSTM5 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for VSTM5 siRNA (h): sc-96678, 2200002K05Rik siRNA (m): sc-108612, VSTM5 shRNA Plasmid (h): sc-96678-SH, 2200002K05Rik shRNA Plasmid (m): sc-108612-SH, VSTM5 shRNA (h) Lentiviral Particles: sc-96678-V and 2200002K05Rik shRNA (m) Lentiviral Particles: sc-108612-V.

Molecular Weight of VSTM5: 22 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](http://www.scbt.com) or our catalog for detailed protocols and support products.