

VWA5A (S-14): sc-137568

BACKGROUND

VWA5A (von Willebrand factor A domain containing 5A), also known as BCSC-1 (breast cancer suppressor candidate 1) or LOH11CR2A (loss of heterozygosity 11 chromosomal region 2 gene A protein), is a 786 amino acid protein containing one VIT domain and one VWFA domain. VWA5A is expressed at low levels in various tissues, with no expression found in 80% of tumor cell lines. Likely acting as a tumor suppressor gene, deletion of VWA5A leads to loss of heterozygosity (LOH) in breast and ovarian tumors, and may have an important role as a potential gene therapy target. Abnormal expression of VWA5A may lead to an increase in adhesion of CNE-2L2 cells associated with an increase in expression of E-cadherin, α -catenin, and p53, resulting in a decrease of malignant activity in cells with ectopic expression of VWA5A. Existing as four alternatively spliced isoforms, the gene encoding VWA5A maps to human chromosome 11q24.2.

REFERENCES

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2. Gentile, M., et al. 2001. Candidate tumour suppressor genes at 11q23-q24 in breast cancer: evidence of alterations in PIG8, a gene involved in p53-induced apoptosis. *Oncogene* 20: 7753-7760.
3. Martin, E.S., et al. 2003. The BCSC-1 locus at chromosome 11q23-q24 is a candidate tumor suppressor gene. *Proc. Natl. Acad. Sci. USA* 100: 11517-11522.
4. Chen, S.L., et al. 2007. Ectopic expression of BCSC-1 gene results in enhancement of adhesion and cell cycling blockade of nasopharyngeal carcinoma CNE-2L2 cell. *Zhongguo Yi Xue Ke Xue Yuan Xue Bao* 29: 533-537.
5. Chen, S.L., et al. 2007. Inhibition of malignant activities of nasopharyngeal carcinoma cell by ectopic expression of BCSC-1 gene. *Zhongguo Yi Xue Ke Xue Yuan Xue Bao* 29: 612-617.
6. Zhou, Y.Q., et al. 2008. Experimental BCSC-1 gene therapy on nasopharyngeal carcinoma mediated by adenovirus. *Zhongguo Yi Xue Ke Xue Yuan Xue Bao* 30: 208-210.
7. Zhou, Y.Q., et al. 2009. Tumor suppressor function of BCSC-1 in nasopharyngeal carcinoma. *Cancer Sci.* 100: 1817-1822.
8. Yuan, F., et al. 2010. Preparation and characterization of monoclonal antibodies for human BCSC-1 protein. *Xi Bao Yu Fen Zi Mian Yi Xue Za Zhi* 26: 1226-1228, 1231.

CHROMOSOMAL LOCATION

Genetic locus: VWA5A (human) mapping to 11q24.2; Vwa5a (mouse) mapping to 9 A5.1.

SOURCE

VWA5A (S-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of VWA5A of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-137568 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

VWA5A (S-14) is recommended for detection of VWA5A of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

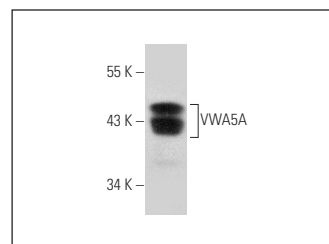
VWA5A (S-14) is also recommended for detection of VWA5A in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for VWA5A siRNA (h): sc-96727, VWA5A siRNA (m): sc-149010, VWA5A shRNA Plasmid (h): sc-96727-SH, VWA5A shRNA Plasmid (m): sc-149010-SH, VWA5A shRNA (h) Lentiviral Particles: sc-96727-V and VWA5A shRNA (m) Lentiviral Particles: sc-149010-V.

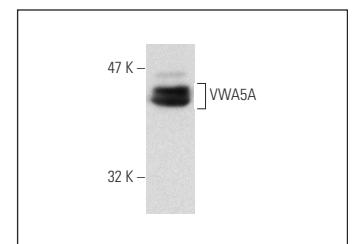
Molecular Weight of VWA5A isoforms 1/2/3/4: 86/47/46/29 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206 or BT-20 cell lysate: sc-2223.

DATA



VWA5A (S-14): sc-137568. Western blot analysis of VWA5A expression in BT-20 whole cell lysate.



VWA5A (S-14): sc-137568. Western blot analysis of VWA5A expression in MCF7 whole cell lysate.

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.