

CXCL16 (D-6): sc-376395

BACKGROUND

CXCL16, also known as SR-PSOX (scavenger receptor for phosphatidylserine and oxidized lipoprotein), binds to CXCR6/Bonzo/STRL33, induces a strong chemotactic response and induces calcium mobilization. CXCL16, an α (CXC) chemokine, also has characteristics of CC chemokines and a structure similar to fractalkine (neurotactin) in having a transmembrane region and a chemokine domain suspended by a mucin-like stalk. Northern blot analysis of mouse and human tissues detect a 2.2 kb CXCL16 transcript in spleen, lymph nodes, Peyer patches, lung, kidney, small intestine and thymus, with weak expression in heart and liver, and no expression in brain and bone marrow. Flow cytometry and Western blot analysis demonstrate expression of a glycosylated cell-surface protein and a cell supernatant soluble protein.

REFERENCES

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2. Wilbanks, A., et al. 2001. Expression cloning of the STRL33/BONZO/TYMSTR ligand reveals elements of CC, CXC, and CX3C chemokines. *J. Immunol.* 166: 5145-5154.
3. Kume, N. 2002. New oxidized LDL receptors and their functions in atherogenesis. *Nippon Ronen Igakkai Zasshi* 39: 264-267.
4. Nakayama, T., et al. 2003. Cutting edge: profile of chemokine receptor expression on human plasma cells accounts for their efficient recruitment to target tissues. *J. Immunol.* 170: 1136-1140.
5. Shashkin, P., et al. 2003. Expression of CXCL16 in human T cells. *Arterioscler. Thromb. Vasc. Biol.* 23: 148-149.
6. Yamauchi, R., et al. 2004. Upregulation of SR-PSOX/CXCL16 and recruitment of CD8⁺ T cells in cardiac valves during inflammatory valvular heart disease. *Arterioscler. Thromb. Vasc. Biol.* 24: 282-287.
7. Wuttge, D.M., et al. 2004. CXCL16/SR-PSOX is an interferon- γ -regulated chemokine and scavenger receptor expressed in atherosclerotic lesions. *Arterioscler. Thromb. Vasc. Biol.* 24: 750-755.
8. Chandrasekar, B., et al. 2004. CXCL16 signals via G_i, phosphatidylinositol 3-kinase, Akt, I κ B kinase, and nuclear factor- κ B and induces cell-cell adhesion and aortic smooth muscle cell proliferation. *J. Biol. Chem.* 279: 3188-3196.

CHROMOSOMAL LOCATION

Genetic locus: CXCL16 (human) mapping to 17p13.2.

SOURCE

CXCL16 (D-6) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 245-273 at the C-terminus of CXCL16 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 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-376395 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

CXCL16 (D-6) is recommended for detection of CXCL16 of human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for CXCL16 siRNA (h): sc-105252, CXCL16 shRNA Plasmid (h): sc-105252-SH and CXCL16 shRNA (h) Lentiviral Particles: sc-105252-V.

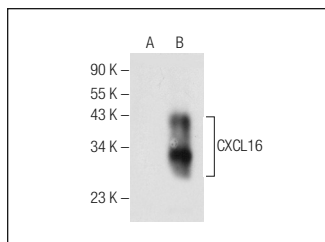
Molecular Weight of CXCL16: 28 kDa.

Positive Controls: CXCL16 (h): 293T Lysate: sc-115964 or HeLa whole cell lysate: sc-2200.

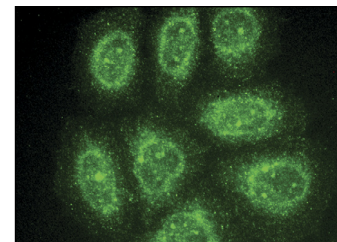
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850.

DATA



CXCL16 (D-6): sc-376395. Western blot analysis of CXCL16 expression in non-transfected: sc-117752 (A) and human CXCL16 transfected: sc-115964 (B) 293T whole cell lysates.



CXCL16 (D-6): sc-376395. Immunofluorescence staining of methanol-fixed HeLa cells showing cytoplasmic localization.

RESEARCH USE

For research use only, not for use in diagnostic procedures.