

SDF-2 (T-12): sc-165443

BACKGROUND

Secretory proteins, such as enzymes, hormones and toxins, are exported by the cell into either ducts (exocrine) or the bloodstream (endocrine). Once secreted, these proteins have a variety of functions within the cell and are involved in signaling pathways, immune responses and hormone regulation. SDF-2 (stromal cell-derived factor-2) is a 211 amino acid protein that contains 3 MIR domains. Expressed throughout the body, SDF-2 shares 92% sequence similarity with its mouse counterpart and is thought to function as a secretory protein. Due to the high similarity between SDF-2 and its corresponding mouse protein, SDF-2 may have a conserved function among mammals.

REFERENCES

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2. Wang, N., et al. 1999. SDF-2 induction of terminal differentiation in *Dictyostelium discoideum* is mediated by the membrane-spanning sensor kinase DhkA. *Mol. Cell. Biol.* 19: 4750-4756.
3. Fukuda, S., et al. 2001. Murine and human SDF2L1 is an endoplasmic reticulum stress-inducible gene and encodes a new member of the Pmt/rt protein family. *Biochem. Biophys. Res. Commun.* 280: 407-414.
4. Meunier, L., et al. 2002. A subset of chaperones and folding enzymes form multiprotein complexes in endoplasmic reticulum to bind nascent proteins. *Mol. Biol. Cell* 13: 4456-4469.
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6. Arinami, T. 2006. Analyses of the associations between the genes of 22q11 deletion syndrome and schizophrenia. *J. Hum. Genet.* 51: 1037-1045.
7. Kinseth, M.A., et al. 2007. The Golgi-associated protein GRASP is required for unconventional protein secretion during development. *Cell* 130: 524-534.

CHROMOSOMAL LOCATION

Genetic locus: SDF2 (human) mapping to 17q11.2; Sdf2 (mouse) mapping to 11 B5.

SOURCE

SDF-2 (T-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of SDF-2 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-165443 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

SDF-2 (T-12) is recommended for detection of SDF-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 SDF family members.

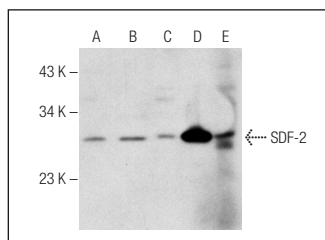
SDF-2 (T-12) is also recommended for detection of SDF-2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for SDF-2 siRNA (h): sc-94163, SDF-2 siRNA (m): sc-153286, SDF-2 shRNA Plasmid (h): sc-94163-SH, SDF-2 shRNA Plasmid (m): sc-153286-SH, SDF-2 shRNA (h) Lentiviral Particles: sc-94163-V and SDF-2 shRNA (m) Lentiviral Particles: sc-153286-V.

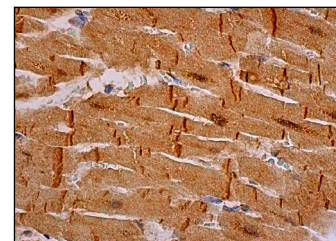
Molecular Weight of SDF-2: 23 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, WI-38 whole cell lysate: sc-364260 or HeLa whole cell lysate: sc-2200.

DATA



SDF-2 (T-12): sc-165443. Western blot analysis of SDF-2 expression in HeLa (A), Hep G2 (B), WI-38 (C) and c4 (D) whole cell lysates and mouse liver tissue extract (E).



SDF-2 (T-12): sc-165443. Immunoperoxidase staining of formalin fixed, paraffin-embedded human heart muscle tissue showing cytoplasmic and intercalated disc staining of myocytes.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **SDF-2 (J-22): sc-100660**, our highly recommended monoclonal alternative to SDF-2 (T-12).