SANTA CRUZ BIOTECHNOLOGY, INC.

CD26 (H-270): sc-9153

SANTA CRUZ BIOTECHNOLOGY
The Power to Question

BACKGROUND

CD26 (dipeptidylpeptidase 4, adenosine deaminase complexing protein 2, ADABP, ADCP2, DPPIV, TP103) is a membrane glycoprotein and a serine exopeptidase that cleaves X-proline dipeptides from the N-terminus of polypeptides. CD26 has an essential role in immune regulation as a T cell activation molecule and a regulator of chemokine function. CD26 associates with CXCR4 and gp120 and may influence the pathophysiology of HIV infection. Adenosine deaminase (ADA) co-localizing with adenosine receptors on dendritic cells are able to interact with CD26 expressed on lymphocytes. This costimulatory signal in the immunological synapse leads to an increase in the production of the T helper 1 and proinflammatory cytokines IFN-γ, TNFα and IL-6. CD26 plays a role in the pathogenesis and behavior of human cancers, including solid tumors and hematological malignancies. CD26-caveolin-1 interaction plays a role in the upregulation of CD86 on TT-loaded monocytes and subsequent engagement with CD28 on T cells, leading to antigen-specific T cell activation.

CHROMOSOMAL LOCATION

Genetic locus: DPP4 (human) mapping to 2q24.2; Dpp4 (mouse) mapping to 2 C1.3.

SOURCE

CD26 (H-270) is a rabbit polyclonal antibody raised against amino acids 261-530 of CD26 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.

STORAGE

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

APPLICATIONS

CD26 (H-270) is recommended for detection of CD26 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

CD26 (H-270) is also recommended for detection of CD26 in additional species, including equine.

Suitable for use as control antibody for CD26 siRNA (h): sc-42762, CD26 siRNA (m): sc-42763, CD26 shRNA Plasmid (h): sc-42762-SH, CD26 shRNA Plasmid (m): sc-42763-SH, CD26 shRNA (h) Lentiviral Particles: sc-42762-V and CD26 shRNA (m) Lentiviral Particles: sc-42763-V.

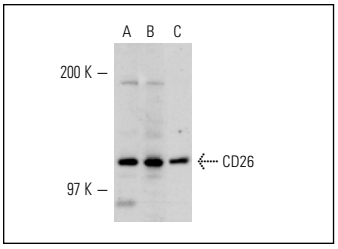
Molecular Weight of CD26: 110 kDa.

Positive Controls: CCRF-CEM cell lysate: sc-2225, GA-10 whole cell lysate: sc-364230 or AML-193 whole cell lysate: sc-364182.

RESEARCH USE

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

DATA



CD26 (H-270): sc-9153. Western blot analysis of CD26 expression in CCRF-CEM (**A**), GA-10 (**B**) and AML-193 (**C**) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Tanaka, Y., et al. 2003. Expressions of hepatobiliary organic anion transporters and bilirubin-conjugating enzyme in differentiating embryonic stem cells. Biochem. Biophys. Res. Commun. 309: 324-330.
2. Girardi, A.C., et al. 2004. Role of dipeptidyl peptidase IV in regulating activity of Na^+/H^+ exchanger isoform NHE3 in proximal tubule cells. Am. J. Physiol., Cell Physiol. 287: C1238-C1245.
3. Eltzschig, H.K., et al. 2006. Endothelial catabolism of extracellular adenosine during hypoxia: the role of surface adenosine deaminase and CD26. Blood 108: 1602-1610.
4. Barreto, A., et al. 2010. Membrane vesicles released by intestinal epithelial cells infected with rotavirus inhibit T-cell function. Viral Immunol. 23: 595-608.
5. Karaoz, E., et al. 2011. Human dental pulp stem cells demonstrate better neural and epithelial stem cell properties than bone marrow-derived mesenchymal stem cells. Histochem. Cell Biol. 136: 455-473.
6. Saglam, O., et al. 2015. IL-6 originated from breast cancer tissue- derived mesenchymal stromal cells may contribute to carcinogenesis. Tumour Biol. 36: 5667-5677.

PROTOCOLS

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