CD13 (H-300): sc-15360



The Power to Question

BACKGROUND

CD13, or aminopeptidase N, is a type II transmembrane glycoprotein that is expressed on most cells of myeloid origin, including monocytes, basophils, eosinophils, neutrophils and myeloid leukemias. CD13 is also found on certain epithelial cells, fibroblasts and osteoclasts. CD13 acts as a zinc-binding metal-loprotease that plays a role in digestion and may function in the inactivation of some regulatory peptides such as enkephalins. CD13 may play a role in the invasion of cancer cells by enhancing their invasive capacity and metastatic behavior. The activity of CD13 can be inactivated using specific inhibitors that evoke apoptosis of CD13-positive cancer cells. Basic fibroblast growth factor (bFGF) expression upregulates CD13 expression in human melanoma cells by activating both the myeloid and the epithelial CD13 promoter.

CHROMOSOMAL LOCATION

Genetic locus: ANPEP (human) mapping to 15q26.1; Anpep (mouse) mapping to 7 D3.

SOURCE

CD13 (H-300) is a rabbit polyclonal antibody raised against amino acids 668-967 of CD13 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

CD13 (H-300) is recommended for detection of CD13 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).

Suitable for use as control antibody for CD13 siRNA (h): sc-29960, CD13 siRNA (m): sc-37242, CD13 shRNA Plasmid (h): sc-29960-SH, CD13 shRNA Plasmid (m): sc-37242-SH, CD13 shRNA (h) Lentiviral Particles: sc-29960-V and CD13 shRNA (m) Lentiviral Particles: sc-37242-V.

Molecular Weight of human CD13: 150 kDa.

Molecular Weight of rat CD13: 120 kDa.

Positive Controls: CD13 (h): 293T Lysate: sc-116664, CCD-1064Sk cell lysate: sc-2263 or rat kidney extract: sc-2394.

STORAGE

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

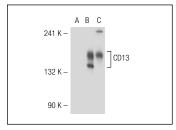
PROTOCOLS

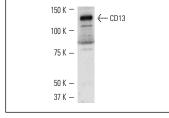
See our web site at www.scbt.com or our catalog for detailed protocols and support products.

RESEARCH USE

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

DATA





CD13 (H-300): sc-15360. Western blot analysis of CD13 expression in non-transfected 293T: sc-117752 (A), human CD13 transfected 293T: sc-116664 (B) and CCD-1064Sk (C) whole cell lysates.

CD13 (H-300): sc-15360. Western blot analysis of CD13 expression in CCD-1064Sk whole cell lysate.

SELECT PRODUCT CITATIONS

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- 4. Shimada, N., et al. 2006. *Bacillus thuringiensis* insecticidal Cry1ab toxin does not affect the membrane integrity of the mammalian intestinal epithelial cells: An *in vitro* study. *In Vitro* Cell. Dev. Biol. Anim. 42: 45-49.
- Kotlo, K., et al. 2007. Aminopeptidase N reduces basolateral Na+/K+-ATPase in proximal tubule cells. Adv. Cancer Res. 293: 1047-1053.
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- 7. Babusiak, M., et al. 2007. Native proteomic analysis of protein complexes in murine intestinal brush border membranes. Proteomics 7: 121-129.
- 8. Kato, K., et al. 2007. Characterization of side-population cells in human normal endometrium. Hum. Reprod. 22: 1214-1223.
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- Gabrilovac, J., et al. 2011. Expression, regulation and functional activities of aminopeptidase N (EC 3.4.11.2; APN; CD13) on murine macrophage J774 cell line. Immunobiology 216: 132-144.



Try CD13 (H-8): sc-166105 or CD13 (3D8): sc-13536, our highly recommended monoclonal aternatives to CD13 (H-300).