

Anti-CD13 Antibody [SN71-04] - BSA and Azide free

HA751849



Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IHC-P, IP, IF-Tissue
Molecular Wt:	Predicted band size: 110 kDa
Clone number:	SN71-04

Description: 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 metalloprotease 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.

Immunogen: Synthetic peptide within Human CD13 aa 401-450 / 967.

Positive control: 293T cell lysate, PANC-1 cell lysate, Mouse kidney tissue lysate, Rat kidney tissue lysate, human liver tissue.

Subcellular location: Cell membrane.

Database links: SwissProt: P15144 Human | P97449 Mouse | P15684 Rat

Recommended Dilutions:

WB	1:1,000-1:5,000
IHC-P	1:2,000
IP	1-2µg/sample
IF-Tissue	1:500

Storage Buffer: 1*PBS (pH7.4).

Storage Instruction: Store at +4°C after thawing. Aliquot store at -20°C. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

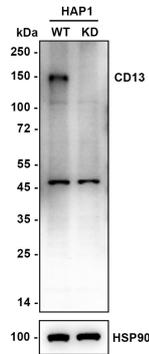
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Images

Fig1: Western blot analysis of CD13 on different lysates with Rabbit anti-CD13 antibody (HA751849) at 1/2,000 dilution.

Lane 1: HAP1-parental cell lysate
Lane 2: HAP1-CD13 KD cell lysate



Lysates/proteins at 10 µg/Lane.

Predicted band size: 110 kDa
Observed band size: 150 kDa

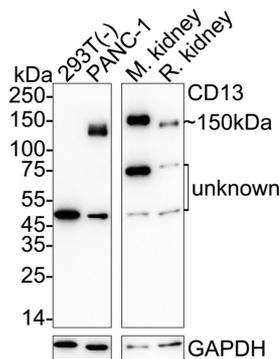
Exposure time: 110 seconds; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA751849) at 1/2,000 dilution was used in K1803 at 4°C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

Fig2: Western blot analysis of CD13 on different lysates with Rabbit anti-CD13 antibody (HA751849) at 1/2,000 dilution.

Lane 1: 293T cell lysate (negative) (20 µg/Lane)
Lane 2: PANC-1 cell lysate (5 µg/Lane)
Lane 3: Mouse kidney tissue lysate (20 µg/Lane)
Lane 4: Rat kidney tissue lysate (20 µg/Lane)



Predicted band size: 110 kDa
Observed band size: 150 kDa

Exposure time: 45 seconds; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA751849) at 1/2,000 dilution was used in 5% NFDM/TBST at 4°C overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

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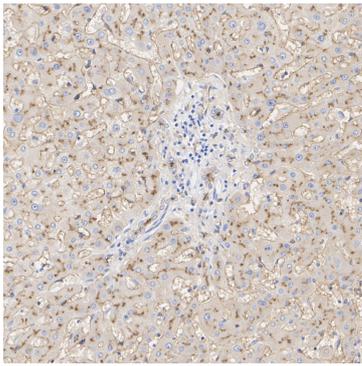


Fig3: Immunohistochemical analysis of paraffin-embedded human liver tissue with Rabbit anti-CD13 antibody (HA751849) at 1/2,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (HA751849) at 1/2,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

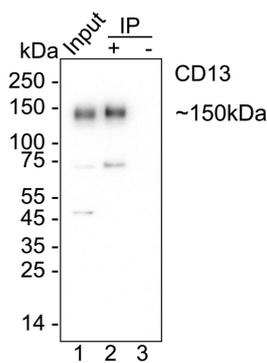


Fig4: CD13 was immunoprecipitated from 0.2 mg PANC-1 cell lysate with HA751849 at 2 µg/10 µl beads. Western blot was performed from the immunoprecipitate using HA751849 at 1/2,000 dilution. HRP Conjugated Anti-Rabbit IgG for IP Nano-secondary antibody at 1/5,000 dilution was used for 1 hour at room temperature.

Lane 1: PANC-1 cell lysate (input)
 Lane 2: HA751849 IP in PANC-1 cell lysate
 Lane 3: Rabbit IgG instead of HA751849 in PANC-1 cell lysate

Blocking/Dilution buffer: 5% NFDm/TBST
 Exposure time: 20 seconds; ECL: K1801

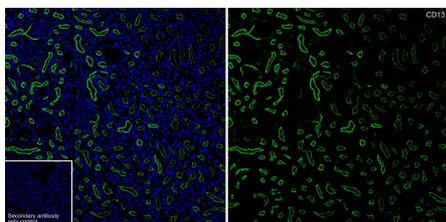


Fig5: Application: IF-Tissue

Species: Mouse

Site: kidney

Sample: Paraffin-embedded section

Antibody concentration: 1/500

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Cui SX et al. 13F-1, a novel 5-fluorouracil prodrug containing an Asn-Gly-Arg (NO₂) COOCH₃ tripeptide, inhibits human colonic carcinoma growth by targeting Aminopeptidase N (APN/CD13). *Eur J Pharmacol* 734:50-9 (2014).
2. Hrdtner C et al. High glucose activates the alternative ACE2/Ang-(1-7)/Mas and APN/Ang IV/IRAP RAS axes in pancreatic -cells. *Int J Mol Med* 32:795-804 (2013).

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