

Product Name: KD-Validated CD13 Recombinant Rabbit Monoclonal Antibody**Catalog #: KVA01607**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human,M
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 109.5kDa

Antigen Information

Gene Name	ANPEP ANPEP; Alanyl Aminopeptidase, Membrane; AP-N; HAPN; Microsomal Aminopeptidase; Aminopeptidase N; Aminopeptidase M; LAP1; P150; CD13; PEPN; Myeloid Plasma
Alternative Names	Membrane Glycoprotein CD13; Alanyl (Membrane) Aminopeptidase; Membrane Alanyl Aminopeptidase; EC 3.4.11.2; Gp150; GP150; AP-M; APN; Alanyl; Aminopeptidase; CD13 Antigen; EC 3.4.11
Gene ID	290.0
SwissProt ID	P15144
Immunogen	A synthesized peptide derived from human CD13

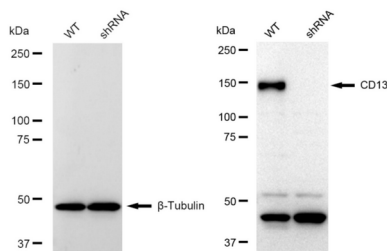
Background

Aminopeptidase N is located in the small-intestinal and renal microvillar membrane, and also in other plasma membranes. In the small intestine aminopeptidase N plays a role in the final digestion of peptides generated from hydrolysis of proteins by gastric and pancreatic proteases. Its function in proximal tubular epithelial cells and other cell types is less clear. The large extracellular carboxyterminal domain contains a pentapeptide consensus sequence characteristic of members of the zinc-binding metalloproteinase superfamily. Sequence comparisons with known enzymes of this class showed that CD13 and aminopeptidase N are identical. The latter enzyme was thought to be involved in the metabolism of regulatory peptides by diverse cell types, including small intestinal and renal tubular epithelial cells, macrophages, granulocytes, and synaptic membranes from the CNS. This membrane-bound zinc metalloprotease is known to serve as a receptor for the HCoV-229E alphacoronavirus as well as other non-human coronaviruses. This gene has also been shown to promote angiogenesis, tumor growth, and metastasis and defects in this gene are associated with various types of leukemia and lymphoma. [provided by RefSeq, Apr 2020]

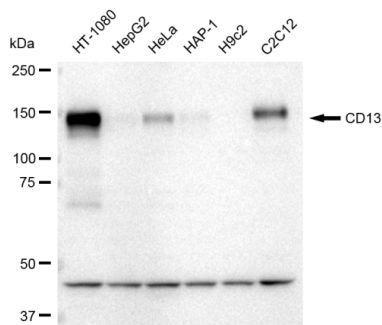
Research Area

Immunology, Stem Cells, Microbiology, Stem Cells

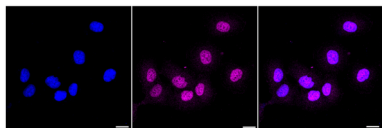
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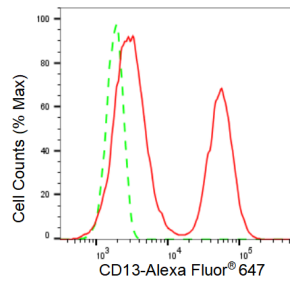
Western blotting analysis using CD13 antibody (KVA01607). CD13 expression in wild type (WT) and CD13 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with CD13 antibody (KVA01607, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using CD13 antibody (KVA01607). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with CD13 antibody (KVA01607, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HT-1080 cells with CD13 antibody (KVA01607, 1:1,000). Nuclei were stained blue with DAPI; CD13 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser intensity and smart gain: Medium. Scale bar: 20 µm.



Flow cytometric analysis of CD13 expression in HT-1080 cells using CD13 antibody (KVA01607, 1:2,000). Green, isotype control; red, CD13.