

#32720 Store at -20°C

CD13/APN (D6V1W) Rabbit mAb



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For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IP, IHC-P, IF-IC, FC-FP	H M R	Endogenous	160	Rabbit IgG	#P15144	290

Product Usage Information	Application	Dilution
	Western Blotting	1:1000
	Immunoprecipitation	1:50
	Immunohistochemistry (Paraffin)	1:200
	Immunofluorescence (Immunocytochemistry)	1:200
	Flow Cytometry (Fixed/Permeabilized)	1:50
Storage	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.	
	For a carrier free (BSA and azide free) version of this product see product #61821.	
Specificity / Sensitivity	CD13/APN (D6V1W) Rabbit mAb recognizes endogenous levels of total CD13/APN protein.	
Source / Purification	Monoclonal antibody is produced by immunizing animals with recombinant protein specific to the carboxy terminus of human CD13/APN protein.	
Background	Aminopeptidase N (APN, CD13) is a widely expressed, membrane-bound proteolytic enzyme that breaks down peptides during digestion, cleaves cell surface antigens during antigen presentation, and acts as a receptor for human viruses, including several coronaviruses. This multifunctional protein is implicated in the regulation of many biological processes, including angiogenesis, cell proliferation, cell migration, inflammation and immune response (1,2). APN was originally identified as the cell surface antigen CD13, which is expressed in myeloid lineage hematopoietic cells and myeloid leukemia (3). Identified substrates of aminopeptidase N include the angiotensin I-III peptide hormones, the opioid peptide met-enkephalin, and cytokines MCP-1 and MIP-1 (4). Abnormal APN protein expression is seen in various forms of cancer, with high APN expression associated with poor survival in colon cancer and non-small cell lung cancer and silenced APN expression related to poor prognosis in prostate cancer (5-7).	
Background References	<ol style="list-style-type: none"> Luan, Y. and Xu, W. (2007) <i>Curr Med Chem</i> 14, 639-47. Mina-Osorio, P. (2008) <i>Trends Mol Med</i> 14, 361-71. Look, A.T. et al. (1989) <i>J Clin Invest</i> 83, 1299-307. Bauvois, B. (2004) <i>Oncogene</i> 23, 317-329. Hashida, H. et al. (2002) <i>Gastroenterology</i> 122, 376-86. Tokuhara, T. et al. (2006) <i>Clin Cancer Res</i> 12, 3971-8. Sørensen, K.D. et al. (2013) <i>Br J Cancer</i> 108, 420-8. 	

Species Reactivity	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
Western Blot Buffer	IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.
Applications Key	WB: Western Blotting IP: Immunoprecipitation IHC-P: Immunohistochemistry (Paraffin) IF-IC: Immunofluorescence (Immunocytochemistry) FC-FP: Flow Cytometry (Fixed/Permeabilized)
Cross-Reactivity Key	H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus Mi: mink C: chicken Dm: D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Sc: S. cerevisiae Ce: C. elegans Hr: horse GP: Guinea Pig Rab: rabbit All: all species expected

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