ARG62721
anti-CD13 antibody [WM15]

Package: 100 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [WM15] recognizes CD13
Tested Reactivity	Hu, NHuPrm
Tested Application	CyTOF®-candidate, FACS, FuncSt, IHC-Fr, IP
Specificity	The clone WM15 recognises the human CD13 cell surface glycoprotein, a 150 kDa molecule expressed on granulocytes, endothelial cells, epithelial cells and myeloid progenitors. HLDA III; WS Code M 213 HLDA IV; WS Code M 44 HLDA IV; WS Code M 209 HLDA V; WS Code M MA191
Host	Mouse
Clonality	Monoclonal
Clone	WM15
Isotype	IgG1
Target Name	CD13
Species	Human
Immunogen	Human AML cells
Conjugation	Un-conjugated
Alternate Names	AP-N; PEPN; LAP1; CD antigen CD13; Aminopeptidase M; gp150; Aminopeptidase N; EC 3.4.11.2; Myeloid plasma membrane glycoprotein CD13; APN; CD13; P150; AP-M; GP150; hAPN; Microsomal aminopeptidase; Alanyl aminopeptidase

Application Instructions

Application table

Application	Dilution
CyTOF®-candidate	Assay-dependent
FACS	1 - 4 µg/ml
FuncSt	Assay-dependent
IHC-Fr	Assay-dependent
IP	Assay-dependent

Application Note

Functional studies: The clone WM15 inhibits infection of cells by human coronavirus and inhibits aminopeptidase N activity of the CD13 molecule immunoprecipitates.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

Form	Liquid
Purification	Purified from hybridoma culture supernatant by protein A-affinity chromatography.
Purity	> 95% (by SDS-PAGE)
Buffer	PBS (pH 7.4) and 15 mM Sodium azide
Preservative	15 mM Sodium azide
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 290 Human Swiss-port # P15144 Human
Gene Symbol	ANPEP
Gene Full Name	alanyl (membrane) aminopeptidase
Background	CD13 (aminopeptidase N, APN) is a 150 kDa type II transmembrane zinc-binding ectopeptidase expressed on various cell types. This metalloprotease preferentially catalyzes removal of neutral amino acids from small peptides, thus activating or inactivating bioactive peptides. CD13 has also role in extracellular matrix degradation, antigen processing and signal transduction, is important in inflammatory responses, regulates intercellular contact, cell motility and vascularization. CD13 is involved in protection of leukemic cells against apoptosis and its expression associated with poor prognosis of carcinomas.
Function	Broad specificity aminopeptidase. Plays a role in the final digestion of peptides generated from hydrolysis of proteins by gastric and pancreatic proteases. May play a critical role in the pathogenesis of cholesterol gallstone disease. May be involved in the metabolism of regulatory peptides of diverse cell types, responsible for the processing of peptide hormones, such as angiotensin III and IV, neuropeptides, and chemokines. Found to cleave antigen peptides bound to major histocompatibility complex class II molecules of presenting cells and to degrade neurotransmitters at synaptic junctions. Is also implicated as a regulator of IL-8 bioavailability in the endometrium, and therefore may contribute to the regulation of angiogenesis. Is used as a marker for acute myeloid leukemia and plays a role in tumor invasion. In case of human coronavirus 229E (HCoV-229E) infection, serves as receptor for HCoV-229E spike glycoprotein. Mediates as well human cytomegalovirus (HCMV) infection. [UniProt]
Highlight	Related products: CD13 antibodies; CD13 ELISA Kits; Anti-Mouse IgG secondary antibodies; Related news: CyTOF-candidate Antibodies
Research Area	Developmental Biology antibody; Immune System antibody
Calculated Mw	110 kDa
PTM	Sulfated. N- and O-glycosylated. May undergo proteolysis and give rise to a soluble form.