

ARG65557 anti-CD13 antibody [WM15] (low endotoxin)

Package: 100 µg
Store at: -20°C

Summary

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| Product Description | Azide free and low endotoxin Mouse Monoclonal antibody [WM15] recognizes CD13 |
| Tested Reactivity | Hu, NHuPrm |
| Tested Application | 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 |
|-------------------|---|-----------------|
| | 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

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| Form | Liquid |
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| Purification | Purification with Protein A. |
| Purification Note | 0.2 µm filter sterilized. Endotoxin level is 95% (by SDS-PAGE) |
| Buffer | PBS (pH 7.4) |
| 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

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| 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] |
| 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. |