

Rabbit Anti-CD13 [EP117]: RM0022, RM0022RTU7

Intended Use: For Research Use Only

Description: CD13, also known as aminopeptidase N, was originally identified as a cell surface glycoprotein expressed by cells of granulocytic and monocytic lineages at various differentiation stages. Sequence comparisons showed that the cDNA sequence of CD13 is identical to aminopeptidase N (APN), a prominent membrane-anchored metalloproteinase expressed by the brush borders of the small intestinal and renal microvillar membrane, and also in other plasma membranes. Human APN is a receptor for one strain of human coronavirus that is an important cause of upper respiratory tract infections. Human CD13 may also mediate HCMV infection by a process that increases binding, but not its enzymatic domain. CD13 has been used as a myeloid marker. The antibody labels leukemic blasts in acute myeloid leukemia (AML) and is helpful in identifying AML subtype M0 acute lymphoid leukemia (ALL). Additionally, CD13 is a sensitive but not entirely specific marker for anaplastic lymphoma kinase positive (ALK+) anaplastic large cell lymphomas (ALCLs). CD13 is also expressed in nonhematopoietic cells including fibroblasts, bone marrow stromal cells, osteoclasts and epithelial cells. A canalicular staining pattern of CD13 in hepatocellular carcinoma (HCC) is useful in differentiation between HCC and non- HCC in liver.

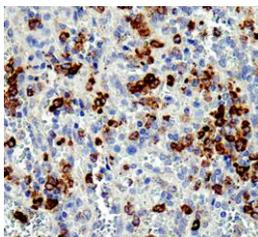
Specifications:

Clone: EP117
 Source: Rabbit
 Isotype: IgG
 Reactivity: Human
 Localization: Cytoplasm, membrane
 Formulation: Purified ascites in PBS pH7.4, containing BSA, glycerol, and ≤0.09% sodium azide (NaN₃).
 Storage: Store at 2°- 8°C
 Applications: IHC
 Package:

Description	Catalog No.	Size
CD13 Concentrated	RM0022	1 ml
CD13 Prediluted	RM0022RTU7	7 ml

IHC Procedure*:

Positive Control Tissue: Spleen, Acute Myeloid Leukemia (AML)
 Concentrated Dilution: 50-200
 Pretreatment: Citrate pH6.0, 15 minutes using Pressure Cooker, or 30-60 minutes Using water bath at 95°-99°C
 Incubation Time and Temp: 30-60 minutes @ RT
 Detection: Refer to the detection system manual
 * Result should be confirmed by an established diagnostic procedure.



FFPE human spleen stained with anti-CD13 using DAB

References:

1. Induction of artificial cancer stem cells from tongue cancer cells by defined reprogramming factors. Harada K, et al. BMC Cancer 16:548, 2016.
2. 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). Cui SX, et al. Eur J Pharmacol 734:50-9, 2014.
3. High glucose activates the alternative ACE2/Ang-(1-7)/Mas and APN/Ang IV/IRAP RAS axes in pancreatic β-cells. Härdtner C, et al. Int J Mol Med 32:795-804, 2013.

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Rev. A