

**Mouse Anti-CD13/Aminopeptidase-N [2D8D11]: MC0379, MC0379RTU7**

**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.

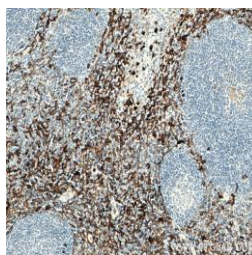
**Specifications:**

Clone: 2D8D11  
 Source: Mouse  
 Isotype: IgG2a  
 Reactivity: Human  
 Localization: Cytoplasm, membrane  
 Formulation: Antibody in PBS pH7.4, containing BSA and ≤ 0.09% sodium azide (NaN<sub>3</sub>)  
 Storage: Store at 2°- 8°C  
 Applications: IHC, ELISA, IF, WB  
 Package:

Description	Catalog No.	Size
CD13/Aminopeptidase-N [2D8D11] Concentrated	MC0379	1 ml
CD13/Aminopeptidase-N [2D8D11] Prediluted	MC0379RTU7	7 ml

**IHC Procedure\*:**

Positive Control Tissue: Spleen, Acute Myeloid Leukemia (AML)  
 Concentrated Dilution: 100-300  
 Pretreatment: Tris EDTA pH9.0, 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 tonsillitis stained with anti-CD13 using DAB

**References:**

1. The pro-inflammatory cytokine 14-3-3e is a ligand of CD13 in cartilage. Nefla M, et al. J Cell Sci 128:3250-62, 2015.
2. The rat placental renin-angiotensin system - a gestational gene expression study. Vaswani K, et al. Reprod Biol Endocrinol 13:89, 2015.
3. 13F-1, a novel 5-fluorouracil prodrug containing an Asn-Gly-Arg (NO<sub>2</sub>) COOCH<sub>3</sub> tripeptide, inhibits human colonic carcinoma growth by targeting Aminopeptidase N (APN/CD13). Cui SX, et al. Eur J Pharmacol 734:50-9, 2014.

Doc. 100-MC0379  
Rev. A