

CD38 Monoclonal Antibody

Catalog No: YM0122

Reactivity: Human

Applications: WB;IHC;IF;ELISA

Target: CD38

Fields: >>Nicotinate and nicotinamide metabolism;>>Metabolic pathways;>>Calcium

signaling pathway;>>Hematopoietic cell lineage;>>Oxytocin signaling

pathway;>>Salivary secretion;>>Pancreatic secretion

Gene Name: CD38

Protein Name: ADP-ribosyl cyclase 1

P56528

Human Gene Id: 952

Human Swiss Prot P28907

No:

Mouse Swiss Prot

No:

Immunogen: Purified recombinant fragment of human CD38 expressed in E. Coli.

Specificity: CD38 Monoclonal Antibody detects endogenous levels of CD38 protein.

Formulation : Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Monoclonal, Mouse

Dilution : WB 1:500 - 1:2000. IHC 1:200 - 1:1000. ELISA: 1:10000.. IF 1:50-200

Purification : Affinity purification

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 34kD

1/3



Cell Pathway:

Nicotinate and nicotinamide metabolism; Calcium; Hematopoietic cell lineage;

P References:

- 1. Trends Biochem Sci. 1992 Dec;17(12):495.
- 2. J Cell Biol. 1999 Sep 6;146(5):1161-72.
- 3. Exp Hematol. 2002 Jun;30(6):582-9.
- 4. Mol Immunol. 2006 Mar;43(7):1029-39.

Background:

The protein encoded by this gene is a non-lineage-restricted, type II transmembrane glycoprotein that synthesizes and hydrolyzes cyclic adenosine 5'-diphosphate-ribose, an intracellular calcium ion mobilizing messenger. The release of soluble protein and the ability of membrane-bound protein to become internalized indicate both extracellular and intracellular functions for the protein. This protein has an N-terminal cytoplasmic tail, a single membrane-spanning domain, and a C-terminal extracellular region with four N-glycosylation sites. Crystal structure analysis demonstrates that the functional molecule is a dimer, with the central portion containing the catalytic site. It is used as a prognostic marker for patients with chronic lymphocytic leukemia. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Sep 2015],

Function:

catalytic activity:NAD(+) + H(2)O = ADP-ribose + nicotinamide.,developmental stage:Preferentially expressed at both early and late stages of the B and T-cell maturation. It is also detected on erythroid and myeloid progenitors in bone marrow, where the level of surface expression was shown to decrease during differentiation of blast-forming unit E to colony-forming unit E.,enzyme regulation:ATP inhibits the hydrolyzing activity.,function:Synthesizes cyclic ADP-ribose, a second messenger for glucose-induced insulin secretion. Also has cADPr hydrolase activity. Also moonlights as a receptor in cells of the immune system.,online information:CD38 entry,similarity:Belongs to the ADP-ribosyl cyclase family.,tissue specificity:Expressed at high levels in pancreas, liver, kidney, brain, testis, ovary, placenta, malignant lymphoma and neuroblastoma.,

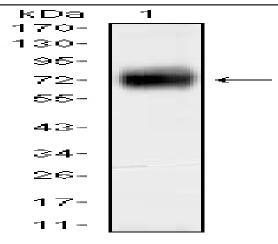
Subcellular Location:

Membrane; Single-pass type II membrane protein.

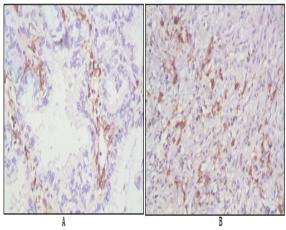
Expression:

Expressed at high levels in pancreas, liver, kidney, brain, testis, ovary, placenta, malignant lymphoma and neuroblastoma.

Products Images



Western Blot analysis using CD38 Monoclonal Antibody against CD38-hlgGFc transfected HEK293 cell lysate.



Immunohistochemistry analysis of paraffin-embedded human lung cancer (A), lymphonodus tissue (B), showing cytomembrane localization with DAB staining using CD38 Monoclonal Antibody.