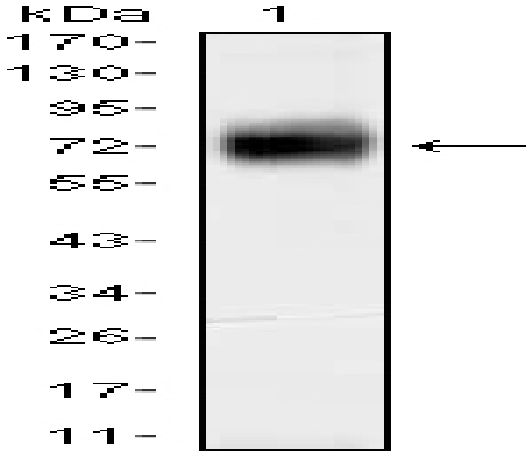
Best Tools for immunology Research

CD38 Monoclonal Antibody

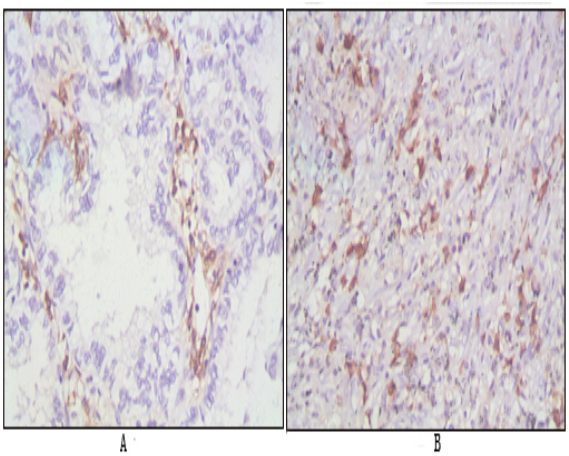
Catalog No :	YM0122
Reactivity :	Human
Applications :	WB;IHC;IF;ELISA
Target :	CD38
Fields :	>>Nicotinate and nicotinamide metabolism;>>Metabolic pathways;>>Calcium signaling pathway;>>Hematopoietic cell lineage;>>Oxytocin signaling pathway;>>Salivary secretion;>>Pancreatic secretion
Gene Name :	CD38
Protein Name :	ADP-ribosyl cyclase 1
Human Gene Id :	952
Human Swiss Prot No :	P28907
Mouse Swiss Prot No :	P56528
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

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.
Tag :	orthogonal
Sort :	422
No4 :	1
Host :	Mouse
Modifications :	Unmodified

Products Images



Western Blot analysis using CD38 Monoclonal Antibody against CD38-hIgGFc 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.