

## CD38 monoclonal antibody

Catalog: MB66047

Host: Mouse

Reactivity: Human

### BackGround:

Cyclic ADP-ribose hydrolase 1 (CD38) is a transmembrane protein involved in several important biological processes, including immune response, insulin secretion, and social behavior. Originally described as a glycosylated immune cell surface marker, additional research determined that CD38 is a multifunctional enzyme that catalyzes the synthesis and hydrolysis of cyclic ADP ribose (cADPR) from NAD. Under acidic conditions, CD38 also catalyzes the synthesis of nicotinic acid adenine dinucleotide phosphate (NAADP) from NADP<sup>+</sup>. Both cADPR and NAADP act as calcium ion mobilizing messengers that target different intracellular Ca<sup>2+</sup> stores. Since CD38 is the primary mammalian NAD<sup>+</sup> glycohydrolase responsible for NAD<sup>+</sup> metabolism, CD38 may be a valuable therapeutic target for treatment of metabolic diseases regulated by NAD<sup>+</sup>-dependent pathways. CD38 has also been considered a possible therapeutic target for antibody-mediated therapy for myeloma and chronic lymphocytic leukemia.

### Product:

Mouse IgG1. Liquid in PBS containing 50% glycerol, 0.2% BSA and 0.01% sodium azide.

### Molecular Weight:

~ 34 kDa

### Swiss-Prot:

P28907

### Purification&Purity:

The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific im-

munogen and the purity is > 95% (by SDS-PAGE).

### Applications:

IHC (1/100 - 1/300)

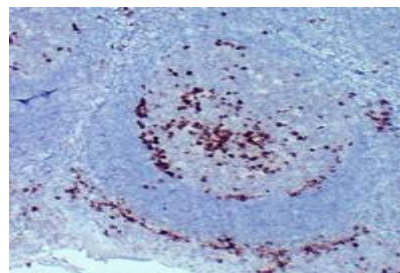
### Storage&Stability:

Store at 4 °C short term. Aliquot and store at -20 °C long term. Avoid freeze-thaw cycles.

### Specificity:

Recognizes endogenous levels of CD38 protein.

### DATA:



Immunohistochemical analysis of CD38 staining in human tonsil formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

### Note:

For research use only, not for use in diagnostic procedure.

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