ARG62829
anti-CD38 antibody [HIT2]

Package: 100 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [HIT2] recognizes CD38
Tested Reactivity	Hu
Tested Application	CyTOF®-candidate, FACS, IHC-Fr, IHC-P, WB
Specificity	The clone HIT2 reacts with CD38 (T10), a 45 kDa type II transmembrane glycoprotein strongly expressed mainly on plasma cells and activated T and B lymphocytes; it is an antigenic marker of lymphoid cells. HLDA III; WS Code T 155
Host	Mouse
Clonality	Monoclonal
Clone	HIT2
Isotype	IgG1
Target Name	CD38
Species	Human
Immunogen	Human thymocytes in foetus
Conjugation	Un-conjugated
Alternate Names	cADPr hydrolase 1; ADPRC 1; EC 3.2.2.6; 2'-phospho-ADP-ribosyl cyclase/2'-phospho-cyclic-ADP-ribose transferase; Cyclic ADP-ribose hydrolase 1; ADPRC1; EC 2.4.99.20; ADP-ribosyl cyclase 1; 2'-phospho-cyclic-ADP-ribose transferase; CD antigen CD38; T10; 2'-phospho-ADP-ribosyl cyclase; ADP-ribosyl cyclase/cyclic ADP-ribose hydrolase 1

Application Instructions

Application table

Application	Dilution
CyTOF®-candidate	Assay-dependent
FACS	1 - 4 µg/ml
IHC-Fr	Assay-dependent
IHC-P	10 µg/ml
WB	2 µg/ml

Application Note

WB: Sample preparation: Resuspend approx. 50 mil. cells in 1 ml cold Lysis buffer (1% laurylmaltoside in 20 mM Tris/Cl, 100 mM NaCl pH 8.2, 50 mM NaF including Protease inhibitor Cocktail). Incubate 60 min on ice. Centrifuge to remove cell debris. Mix lysate with non-reducing SDS-PAGE sample buffer. Boil for 5 min. Application note: Non-reducing condition.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Positive Control

WB: Raji

Properties

Form	Liquid
Purification	Purified by protein A
Purity	> 95% (by SDS-PAGE)
Buffer	PBS (pH 7.4) and 15 mM Sodium azide
Preservative	15 mM Sodium azide
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 952 Human Swiss-port # P28907 Human
Gene Symbol	CD38
Gene Full Name	CD38 molecule
Background	CD38 (NAD+ glycohydrolase) is a type II transmembrane glycoprotein able to induce activation, proliferation and differentiation of mature lymphocytes and mediate apoptosis of myeloid and lymphoid progenitor cells. Another role of CD38 is provided by enzymatic activity of its extracellular part. CD38 acts as NAD+ glycohydrolase converting NAD+ into ADP-ribose, as ADP-ribosyl cyclase producing cADPR and as cADPR hydrolase, thus affecting levels of calcium-mobilizing metabolites. ADPR produced by CD38 serves as an important second messenger of neutrophil and dendritic cell migration.
Function	Synthesizes the second messagers cyclic ADP-ribose and nicotinate-adenine dinucleotide phosphate, the former a second messenger for glucose-induced insulin secretion. Also has cADPr hydrolase activity. Also moonlights as a receptor in cells of the immune system. [UniProt]
Highlight	Related products: CD38 antibodies; CD38 Duos / Panels; Anti-Mouse IgG secondary antibodies; Related news: Lymphoma CyTOF-candidate Antibodies
Research Area	Cancer antibody; Developmental Biology antibody; Immune System antibody; Metabolism antibody; Pro-B Cell Marker antibody; Pre-B Cell Marker antibody
Calculated Mw	34 kDa