

ARG65537 anti-CD88 / C5AR1 antibody [S5/1]

Package: 50 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [S5/1] recognizes CD88 / C5AR1
Tested Reactivity	Hu, Bov, Frt, Rb
Tested Application	CyTOF®-candidate, FACS, IHC-P, IP, WB
Specificity	The mouse monoclonal antibody S5/1 recognizes the CD88 protein, a 43 kDa receptor of C5a component of the complement cascade.
Host	Mouse
Clonality	Monoclonal
Clone	S5/1
Isotype	IgG2a
Target Name	CD88 / C5AR1
Species	Human
Immunogen	Recombinant N-terminal peptide (Asp15-Asp27) of human C5aR
Conjugation	Un-conjugated
Alternate Names	CD88; C5R1; C5AR; CD antigen CD88; C5a anaphylatoxin chemotactic receptor 1; C5a anaphylatoxin chemotactic receptor; C5A; C5aR; C5a-R

Application Instructions

Application table	Application	Dilution
	CyTOF®-candidate	Assay-dependent
	FACS	3 - 12 µg/ml
	IHC-P	Assay-dependent
	IP	Assay-dependent
	WB	Assay-dependent
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form	Liquid
Purification	Purified from ascites by protein-A affinity chromatography.
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: 728 Human Swiss-port # P21730 Human
Gene Symbol	C5AR1
Gene Full Name	complement component 5a receptor 1
Background	CD88 / C5aR is a G protein-coupled seven membrane-spanning protein serving as a receptor for C5a component of the complement cascade, and is expressed mainly by monocytes, macrophages, neutrophils, eosinophils, and mast cells, but also e.g. by hepatocytes, glial cells, vascular endothelial cells, or cardiomyocytes. The binding of C5a to CD88 is associated with inflammatory response, including superoxide anion production, chemotaxis, and increased production of acute phase proteins. Expression of CD88 on synovial mast cells and their C5a-mediated degranulation plays a role in pathogenesis of rheumatoid arthritis.
Function	Receptor for the chemotactic and inflammatory peptide anaphylatoxin C5a (PubMed:1847994, PubMed:8182049, PubMed:7622471, PubMed:9553099, PubMed:10636859, PubMed:15153520). The ligand interacts with at least two sites on the receptor: a high-affinity site on the extracellular N-terminus, and a second site in the transmembrane region which activates downstream signaling events (PubMed:8182049, PubMed:7622471, PubMed:9553099). Receptor activation stimulates chemotaxis, granule enzyme release, intracellular calcium release and superoxide anion production (PubMed:10636859, PubMed:15153520). [UniProt]
Highlight	Related products: CD88 antibodies; Anti-Mouse IgG secondary antibodies; Related news: CyTOF-candidate Antibodies
Research Area	Cell Biology and Cellular Response antibody; Immune System antibody; Metabolism antibody; Signaling Transduction antibody
Calculated Mw	39 kDa
PTM	Sulfation plays a critical role in the association of C5aR with C5a, but no significant role in the ability of the receptor to transduce a signal and mobilize calcium in response to a small a small peptide agonist (PubMed:11342590). Sulfation at Tyr-14 is important for CHIPS binding (PubMed:21706042). Phosphorylated on serine residues in response to C5a binding, resulting in internalization of the receptor and short-term desensitization to the ligand. The key residues involved in this process are Ser-334 and Ser-338.