

CD16 / Fc Gamma Receptor III Monoclonal Mouse Antibody (CB16)

Product Description

This antibody recognizes CD16 (FcγRIII), the low-affinity receptor for IgG with an apparent molecular weight of 50-80 kDa. CD16 is represented by two similar genes, CD16A (FcγRIIIA), which exists as a hetero-oligomeric polypeptide-anchored form in macrophages and NK cells and CD16B (FcγRIIIB), which exist as a monomeric GPI-anchored form in neutrophils. Furthermore, there are two known polymorphisms of CD16B, NA-1 and NA-2. Individuals homozygous for NA-2 show a lower phagocytic capacity compared with NA-1. CD16 binds IgG in the form of immune complexes and shows preferential binding of IgG1 and IgG3 isotypes and minimal binding of IgG2 and IgG4. Upon IgG binding, both CD16 isoforms initiate signal transduction cascades that lead to a variety of responses including antibody-dependent cell-mediated cytotoxicity (ADCC), phagocytosis, degranulation and proliferation. This antibody is available purified with BSA/azide at 200 ug/mL, or BSA/azide-free at 1 mg/mL.

References

Nemec M et al. Murine monoclonal antibodies to human A erythrocytes: differential reactivity with N-acetyl-D-galactosamine. Vox Sang 52:125-8 (1987)

Product attributes

Antibody number	#0038
Antibody reactivity (target)	CD16, Fc gamma receptor III
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	CB16
Isotype	IgM
Molecular weight	50-80 kDa
Synonyms	CD162; CLA; Cutaneous lymphocyte associated antigen; P-selectin glycoprotein ligand 1; PSGL1; Selectin P ligand; SELPLG
Human gene symbol	FCGR3A
Entrez gene ID	2214
SwissProt	P08637
Unigene	372679
Immunogen	Human CD16
Antibody target cellular localization	Plasma membrane
Species reactivity	Human
Antibody application notes	For coating for ELISA, order Ab without BSA. Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Not recommended for flow cytometry. Optimal dilution and staining procedure for a specific application should be determined by user. Recommended starting concentrations for titration are 1-2 ug/mL for most applications
Positive control	K-562 or U-937 cells. Lymph nodes and tonsils.
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C. Note: store BSA-free antibodies at -10 to -35 °C
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Antibody research areas	Immunology
Cell/tissue expression	Monocytes/macrophages, Neutrophils, NK cells