

Product Specification Sheet

**Recombinant (HEK) Human FcGR3a/CD16a Protein**

Cat # FCGR3A352-M

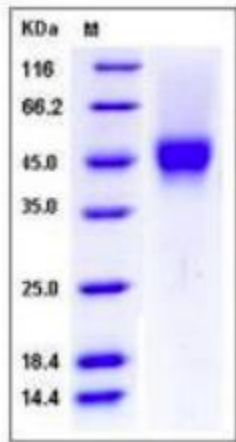
Mouse Monoclonal Anti-Human FcGR3a/CD16a antibody

SIZE: 100 ug

CD16 is a low affinity Fc receptor, and has been identified as Fc receptors FcγRIIIa (CD16a) and FcγRIIIb (CD16b). These receptors bind to the Fc portion of IgG antibodies. CD16 encoded by two different highly homologous genes in a cell type-specific manner. CD16 is found on the surface of natural killer cells, neutrophil polymorphonuclear leukocytes, monocytes and macrophages.

FCGR3A, it is also known as CD16a, encodes a transmembrane protein expressed on activated monocytes/macrophages, natural killer (NK) cells, and a subset of T cells. CD16a / FCGR3A is a receptor expressed on NK cells that facilitates antibody dependent cellular cytotoxicity (ADCC) by binding to the Fc portion of various antibodies. CD16a / FCGR3A also has a broader function. CD16a / FCGR3A is directly involved in the lysis of some virus infected cells and tumor cells by NK cells, independent of antibody binding. Cross-linking of CD16a / FCGR3A on NK cells resulted in increased intracellular Ca<sup>2+</sup> levels and a cascade of biochemical events similar to those activated by the T cell receptor. CD16a / FCGR3A on human NK cells is a lysis receptor that mediates the direct killing of some virus infected and tumor cells, independent of antibody ligation.

**Source of Antigen**



Recombinant (HEK) human CD16a comprises 223 amino acids with a predicted molecular mass of 25.1 kDa (> 95 %). A DNA sequence encoding the human CD16a (P08637-1) (Met 1-Gln 208) was fused with a c-terminal polyhistidine tagged AVI tag at the C-terminus.

As a result of glycosylation, CD16a migrates as an approximately 46 kDa band in SDS-PAGE under reducing conditions.

**Storage:**

**Short-term:** unopened, undiluted vials for less than a week at 4°C.

**Long-term:** at -20°C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

**Stability:** 6-12 months at -20°C or below.

**Shipping:** 4°C for solutions and room temp for powder.

\*This product is for In vitro research use only.

**Related material available from ADI**

Catalog#	Description
FCGR3A35-R-25	Recombinant (HEK) Human FcGR3a/CD16a Protein (48-321aa, 176Phe, >95%, his-tag, ~45 kda, low endotoxins)
FCGR3A36-R-25	Recombinant (HEK) Human FcGR3a/CD16a Protein (1-208aa, 176Phe, >95%, C-AVI, his-tag, ~48 kda, low endotoxins)-Biotin, Active
FCGR3A37-R-25	Recombinant (HEK) Human FcGR3a/CD16a Protein (1-208aa, 176Val, >95%, his-tag, ~48 kda, low endotoxins)
FCGR3A38-R-25	Recombinant (HEK) Human FcGR3a/CD16a Protein (1-208aa, 176Val, >95%, C-AVI, his-tag, ~26 kda, low endotoxins)-Biotin, Active
FCGR3A39-R-25	Recombinant (CHO) Human FcGR3a/CD16a Protein (1-208aa, 176Val, >95%, his-tag, ~45 kda, low endotoxins), active
FCGR3A40-R-25	Recombinant (CHO) Human FcGR3a/CD16a Protein (1-208aa, 176Phe, >95%, his-tag, ~45 kda, low endotoxins)
FCGR3B31-R-25	Recombinant (E. coli) Human FcGR3b/FCRIII/CD16b Protein (18-193aa, >95%, No-tag, ~22 kda), active
FCGR3B32-R-25	Recombinant (CHO) Human FcGR3b/FCRIII/CD16b Protein (1-200aa, >95%, His-tag, ~38-43 kda, low endotoxin), active
FCGR3B331-A	Rabbit Anti-Human FcGR3b/FCRIII/CD16b Protein (NA2 allotype, 1-200aa) IgG, aff pure
FCGR3B332-M	Mouse Monoclonal Anti-Human FcGR3b/FCRIII/CD16b Protein (NA2 allotype, 1-200aa) IgG, aff pure
FCGR3B33-R-25	Recombinant (HEK) Human FcGR3b/FCRIII/CD16b Protein (NA2allotype, 1-200aa, >95%, His-tag, ~50-55 kda, low endotoxin), active

FCGR3A36-R-25

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