

Product datasheet for **TP721246**

CD16 (FCGR3A) Human Recombinant Protein

Product data:

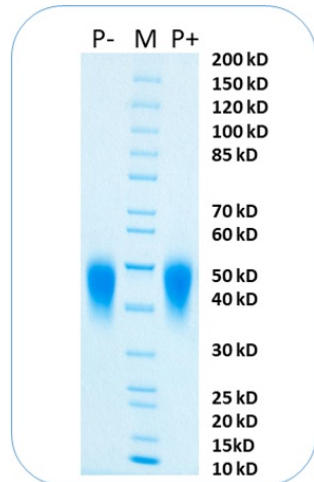
Product Type:	Recombinant Proteins
Description:	Human CD16a Protein (C-His-Avi, 176V)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	Gly17-Gln208
Tag:	C-His-Avi
Predicted MW:	The protein has the predicted molecular weight of 25.5 kDa and migrates at approximately 40-50 kDa on SDS-PAGE with DTT-reduced condition.
Concentration:	25µg size is bottled at 0.2mg/mL concentration. 100 µg size is bottled at lot specific concentration.
Purity:	>90%
Buffer:	1xPBS buffer, pH7.4
Bioactivity:	Positive
	<p>The definition of the active protein (purified and biotinylated) is defined as the protein that can bind to its biological receptor/ligand. For conjugated protein, it is defined with its function to bind to the ScFv of the active CAR-transfected cells in flow cytometry test.</p>
Preparation:	Affinity Ni-NTA
Applications:	ELISA
Storage:	An unopened vial can be stored at 4°C for 2 weeks or at -20°C and below for six months. This stock solution should be aliquoted and stored at ≤ -70°C to minimize the freeze/thaw cycles.
Stability:	6 Months
RefSeq:	NP_001121068
Locus ID:	2214
UniProt ID:	P08637



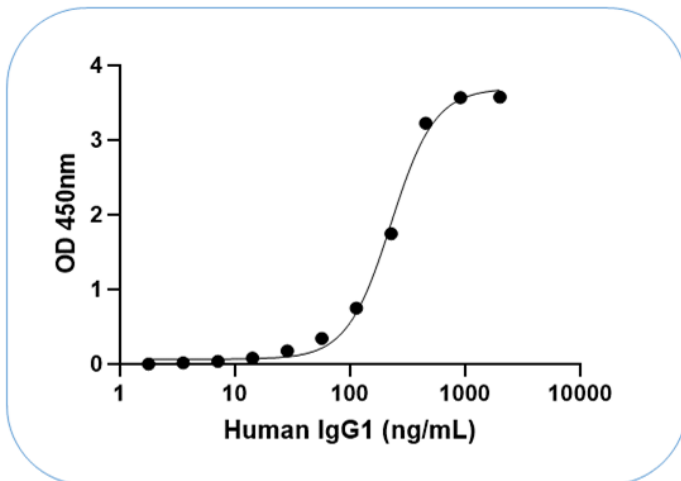
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Summary:

CD16a (FCGR3A) and its homolog CD16b are receptors for the Fc portion of human IgG. In contrast to CD64, which is a high affinity Fc binding protein, both CD16a and CD16b can bind Fc portion of human IgG with relative low affinity. Human CD16a is expressed mainly on natural killer cells, macrophages, T cells, and monocytes. While human CD16b is expressed on Neutrophils and eosinophils. In human cells, a single nucleotide polymorphism (T230A) creates a high binding (176V) and a low binding (176F) variant. Clinically, mutations in CD16a have been linked to vulnerability to viral infections, alloimmune neonatal neutropenia, and systemic lupus erythematosus.

Product images:


Human CD16a protein (C-His-Avi) is coated at 8ug/mL (100u/well). Human IgG1 can bind human CD16a protein in the dose dependant manner. The EC50 is about 100-400 ng/mL.



Human CD16a protein (C-His-Avi) on SDS-PAGE under reducing condition P(+) and non-reducing condition P(-) . The purity of this protein appears to be greater than 95% based on Coomassie-blue staining.