# Mouse Fc gamma RIIb / CD32b protein

Catalog number MOGR2B-U



#### **Synonyms**

CD32, CD32B, FCGR2, FCGR2B, FCGRII, FCGRIIB, FCR2, FCR2B, FCRII, FCRIIB, IGFR2, IGFR2B, IGFRII, IGFRIIB, Fc gamma R2, Fc gamma R2b, Fc gamma RII, Fc gamma RIIb, Fcg R2, Fcg R2b, Fcg RII, Fcg RIIb

#### **Species**

Mouse

#### **Accession number**

P08101

## **Allotype**

Not applicable

#### **Conjugation status**

Unconjugated

### **Purity**

>95% monomer purity as determined by SDS-PAGE and SEC-HPLC.

#### **Endotoxin**

<1.0 EU per mg as determined by the LAL method.

### **Protein design**

The sequence of the extracellular domain of mouse CD32b (Leu 40-Ala 217) was fused with a C-terminal tag consisting of the AVI tag, TEV protease recognition sequence and a 10-His tag. The full protein sequence can be downloaded from the product webpage.

#### Molecular weight

The recombinant mouse CD32b including tag consists of 217 amino acids and has a theoretical mass of 24649 Da.

## **Expression host**

Human embryonic kidney (HEK) 293 cells

#### **Formulation**

Lyophilized from sterile PBS, pH 7.4. No preservatives or cryoprotectants have been added.

#### Reconstitution

To obtain a final concentration of 1 mg/ml reconstitute 250  $\mu g$  vials with 250  $\mu l$  water and 1.0 mg vials with 1.0 ml water.

Solubilize for 30 to 60 minutes at room temperature with occasional gentle mixing. Do not vortex.

### **Shipping**

All recombinant proteins are provided as lyophilized powder and shipped at ambient temperature.

## Storage and stability

Lyophilized proteins are stable at ambient temperature for at least 2 weeks. If the protein is not to be used immediately then the protein should be stored in lyophilized form at -20 °C for up 12 months. Once the protein has been reconstituted we recommend storage at 4 °C for up to one week. For longer term storage of protein in solution we recommend aliquoting into smaller vials to avoid repeated freeze-thaw cycles and storage at -20 or -80 °C for up to 3 months.

### **Quality control**

All recombinant proteins are tested for purity by SDS-PAGE and SEC-HPLC with a minimum requirement of >95% monomer purity. Biological activity is confirmed by surface plasmon resonance on a Biacore instrument. Please see certificate of analysis (COA) for batch specific quality control data and images.

# **Product description**

Low affinity immunoglobulin gamma Fc receptor IIb, also known as FcyRIIb or CD32b, is a type I integral membrane glycoprotein. CD32b is a member of the immunoglobulin superfamily and is expressed on B cells, subsets of monocytes, macrophages and granulocytes, platelets and mast cells. CD32b binds monomeric IgG with low affinity but is efficient at binding immune complexes and is a negative regulator of cell activation, proliferation, endocytosis, phagocytosis, and degranulation. CD32b is structurally composed of two extracellular immunoglobulin domains of the C2-type that interact with the IgG Fc domain, a transmembrane domain and a short cytoplasmic tail containing the immunoreceptor tyrosine-based inhibition (ITIM) motif. The product provided only contains the extracellular portion of CD32.