

**DESCRIPTION**

**Source** Chinese Hamster Ovary cell line, CHO-derived FGL2 protein  
Asn24-Pro439, with a C-terminal 6-His tag  
Accession # XP\_005550475.1

**N-terminal Sequence Analysis** Asn24 and Asp32

**Predicted Molecular Mass** 49 kDa

**SPECIFICATIONS**

**SDS-PAGE** 54-78 kDa, under reducing conditions.

**Activity** Measured by its binding ability in a functional ELISA.  
When Recombinant Human Fcγ RIIB/C (CD32b/c) (Catalog # 1875-CD) is immobilized at 2 μg/mL (100 μL/well), Recombinant Cynomolgus Monkey/Rhesus Macaque FGL2 His-tag (Catalog # 11193-FL) binds with an ED<sub>50</sub> of 60.0-900 ng/mL.

**Endotoxin Level** <0.10 EU per 1 μg of the protein by the LAL method.

**Purity** >90%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.

**Formulation** Supplied as a 0.2 μm filtered solution in Tris, NaCl and Glycerol with Trehalose. See Certificate of Analysis for details.

**PREPARATION AND STORAGE**

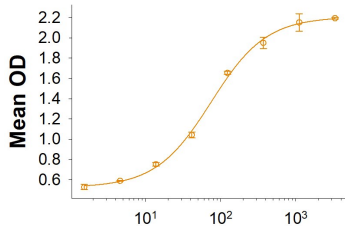
**Shipping** The product is shipped with dry ice or equivalent. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage** Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after opening.
- 3 months, -20 to -70 °C under sterile conditions after opening.

**DATA**

**Binding Activity**



**Recombinant Cynomolgus Monkey/Rhesus Macaque FGL2 His-tag Protein Binding Activity.** When Recombinant Human Fcγ RIIB/C (CD32b/c) (Catalog # 1875-CD) is immobilized at 2 μg/mL (100 μL/well), Recombinant Cynomolgus Monkey/Rhesus Macaque FGL2 His-tag Protein (Catalog # 11193-FL) binds with an ED<sub>50</sub> of 60.0-900 ng/mL.

**Recombinant Cynomolgus Monkey/Rhesus Macaque FGL2 (ng/mL)**

**BACKGROUND**

FGL2 (fibrinogen-like protein 2), also called fibroleukin, is a 64-70 kDa secreted glycoprotein of the Fibrinogen-like superfamily. It has prothrombinase activity and also promotes T regulatory (Treg) activity (1-6). The human FGL2 gene encodes a 439 amino acid (aa) protein that contains a 23 aa signal sequence and a 416 aa mature sequence with a coiled-coil region and a fibronectin C-terminal homology domain or FRED (1, 2). A 260-280 kDa FGL2 complex is thought to be a tetramer formed by covalent disulfide linkage of dimers that are associated via coiled-coil interactions (2, 3). Mature cynomolgus monkey/rhesus macaque FGL2 shares 99.3% aa identity with human FGL2. FGL2 appears to have two modes of action. One mode involves its prothrombinase activity, which requires calcium and acidic phospholipids (4). This mode is thought to be active during hepatitis viral infections when FGL2, produced by macrophages in response to IFN-gamma, induces hepatic apoptosis and fibrin deposition (7). In addition, FGL2 produced by endothelial cells in response to TNF-alpha within cardiac xenografts or allografts promotes coagulation during acute vascular rejection (7-9). A second mode of action involves soluble (not phospholipid-associated) FGL2 and is independent of prothrombinase activity (2). Soluble FGL2 is required for Treg function, and directly suppresses DC, T, and B cell immune reactivity; consequently, some FGL2-deficient mice develop autoimmune glomerulonephritis (5, 6). *In vitro*, soluble FGL2 can skew T cell polarization toward Th2 and inhibit proliferation of stimulated T cells and maturation of DC (6). In pregnancy, fetal trophoblast cells secrete FGL2. The immune suppressive mode of FGL2 may prevent early fetal loss; however, the procoagulant mode is thought to mediate infection-triggered abortion (10). In the central nervous system (CNS), FGL2 was shown to be highly expressed in glioma stem cells and primary glioblastoma cells and may serve as a critical immune oncology target (11).

**References:**

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