**DESCRIPTION**

**Species Reactivity** Mouse

**Specificity** Detects mouse FGL2 in direct ELISAs.

**Source** Monoclonal Rat IgG2A Clone # 829321

**Purification** Protein A or G purified from hybridoma culture supernatant

**Immunogen** Chinese Hamster Ovary cell line, CHO-derived mouse FGL2 Val20-Pro432 Accession # P12804

**Formulation** Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.

**APPLICATIONS**

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

<table>
<thead>
<tr>
<th>Sample</th>
<th>Western Blot</th>
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<td>2 µg/mL</td>
<td>See Below</td>
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**DATA**

**Western Blot**

Detection of Mouse FGL2 by Western Blot. Western blot shows lysates of CTLL-2 mouse cytotoxic T cell line and CH-1 mouse B cell lymphoma cell line. PVDF membrane was probed with 2 µg/mL of Rat Anti-Mouse FGL2 Monoclonal Antibody (Catalog # MAB5257) followed by HRP-conjugated Anti-Rat IgG Secondary Antibody (Catalog # HAF005). A specific band was detected for FGL2 at approximately 70 kDa (as indicated).

This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

**PREPARATION AND STORAGE**

**Reconstitution** Reconstitute at 0.5 mg/mL in sterile PBS.

**Shipping** The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C

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

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.
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 (T<sub>reg</sub>) activity (1-6). The mouse FGL2 gene encodes a 432 amino acid (aa) protein that contains a 19 aa signal sequence and a 413 aa mature sequence with a coiled-coil region and a fibronectin C-terminal homology domain or FRED (1, 2). A 260-280 aa 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 mouse FGL2 shares 91% aa identity with rat FGL2, and 77-80% aa identity with human, equine, porcine, bovine and canine 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-γ, induces hepatic apoptosis and fibrin deposition (7). In addition, FGL2 produced by endothelial cells in response to TNF-α 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 T<sub>reg</sub> 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).

References: