ALPHA DIAGNOSTIC INTERNATIONAL

Product Specification Sheet

Fibrinogen-like protein 2 (FGL2) Antibodies & Control

Cat # FGL22-A	Rabbit Anti-Human Fibrinogen-like protein 2 (FGL2) IgG, aff pure	**SIZE**: 100 ul
Cat # FGL22-C	Rec. (E.coli) Human Fibrinogen-like protein 2 (FGL2) protein control for Western blot	**SIZE**: 100 ul

Fibrinogen-like protein 2 (FGL2; human 439-aa; Chromosome 7; mouse 432-aa, chromosome 5; human and mouse FGL2 proteins are ~80% conserved) is a secreted protein that is similar to the β- and γ-chains of fibrinogen. The carboxyl-terminus of the encoded protein consists of the fibrinogen-related domains (FRED). The encoded protein forms a tetrameric complex which is stabilized by interchain disulfide bonds. This protein may play a role in physiologic functions at mucosal sites. Fgl2 is a protein that exhibits pleiotropic effects within the body and is an important immune regulator of both innate and adaptive responses. The protein exists as both a type II transmembrane protein found on the surface of macrophages and endothelial cells and can be constitutively secreted by both CD4+ and CD8+ T cells.

Membrane bound fgl2 (**mfgl2**) exhibits a prothrombinase activity, resulting in fibrin deposition, vascular thrombosis and tissue inflammation within an affected tissue, largely contributing to the innate arm of immunity. **Soluble fgl2** – The Role of T regulatory cells in immune suppression: In addition to its constitutive secretion by CD4+ and CD8+ T cells, the secreted form of fgl2 (sfgl2) can be inducibly secreted by Foxp3+ CD4+ CD25+ T regulatory cells (Tregs). Such Treg cells play a vital role in dampening the immune response after the clearance of an infection to prevent sterile inflammation. These cells also play a fundamental role in maintaining self-tolerance by suppressing the activation and expansion of self-reactive lymphocytes that may instigate autoimmunity.

Recommended name: Fibroleukin
Alternative name(s): Fibrinogen-like protein 2, pT49

Source of Antigen and Antibodies

Antigen	FGL2 (protein Accession #Q14314)
Ab Host/type	Rabbit, polyclonal, Aff pure IgG (**cat #FGL22-A**) purified over antigen-agarose column
2-Ab	**Goat Anti-rabbit IgG-HRP** cat # 20320 (AP, biotin, FITC conjugates also available)
-ve control	# 20009-1, Rabbit (non-immune) IgG, purified, suitable for ELISA, Western, IHC as –ve control

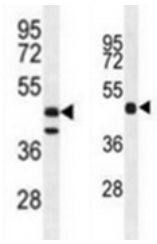
Recombinant FGL2 protein (24-439 aa, ~51.71 kda) was expressed as His-tag protein in E.coli and purified (>95%). For Western blot +ve control (**Cat # FGL22-C**) is supplied in SDS-PAGE sample buffer (reduced). Load 10 ul/lane of **FGL22**-C for good visibility with antibody Cat # **FGL22**-A. Store at -20°C in suitable size aliquots. SDS may crystallize in cold conditions. It should redissolve by warming before taking it from the stock. It should be heated once prior to loading on gels. If the product has been stored for several weeks, then it may be preferable to add 5 ul of fresh 2x sample buffer per 10 ul of the **FGL22**-C solution prior to heating and loading on gels. This preparation is not biologically active. It is not suitable for ELISA or other applications where native protein is required. Do not freeze, thaw, or heat repeatedly

Form & Storage of Antibodies/ Control

Affinity pure IgG
☐ 100 ug/100 ul ☐ Solution ☐ Lyophilized powder
Supplied in **Buffer**: PBS + 0.1% BSA
Reconstitute powder in PBS at 1mg/ml

Storage
Short-term: unopened, undiluted liquid vials at **-20°C** and powder at **4°C** or **-20°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.

Recommended Usage



We recommend the use of 0.5-1% milk in all primary/secondary antibody-enzyme conjugate incubations in order to suppress non-specific bands.

Western blotting: 1:500-1:2000 for affinity pure antibody using ECL
ELISA: Control peptide can be used to coat ELISA plates at 1 ug/ml and detected with antibodies (1:1000-1:10,000 for affinity pure).

Histochemistry & Immunofluorescence: We recommend the use of affinity-purified antibody at 2-10 ug/ml in paraformaldehyde fixed sections of tissues

General References: Marazzi S (J. Immunol. 161, 138-147; Ruegg C (1995) Gene 160, 257-262; Ghanekar A (2004) J. Immunol. 172, 5693-5701; Zhu CL (2006) World J. Gastroenterol. 11, 6936-6940;

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

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