#### **Human Recombinant Hepassocin**

# **Cytokines**

Hepassocin, His tag



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Catalog #100-1298 100 μg

### **Product Description**

Hepassocin, also known as fibrinogen-like protein 1 (FGL1), is a member of the fibrinogen superfamily whose members share a fibrinogen domain at their C-terminus. It is secreted as a homodimer that consists of 312 amino acids and is expressed predominantly in the liver and weakly in the pancreas (Hara et al.). This protein contains a His-residue tag at the carboxyl end of the polypeptide chain. Hepassocin is an acute-phase reactant whose expression in HepG2 cells was shown to be regulated by IL-6 (Liu & Ukomadu). It binds to lymphocyte activation gene 3 (LAG-3) in an MHC class II independent manner and inhibits antigen-specific T-cell activation (Wang et al.). Hepassocin also has restorative functions in the liver, reducing apoptosis and accelerating hepatocyte proliferation in vivo (Li et al.). In addition to its protective role in liver injury, studies show that hepassocin expression was upregulated in gastric cancer tissues (Zhang et al.) and in breast cancer cells (Du et al.), suggesting its predictive potential in cancer progression.

### **Product Information**

Alternative Names: FGL1, HFREP1, HP-041, LFIRE1, LFIRE-1

Accession Number: NP\_004458.3 (Leu23-Ile312) was expressed with a polyhistidine tag at the C-terminus.

Amino Acid Sequence: LEDCAQEQMR LRAQVRLLET RVKQQQVKIK QLLQENEVQF LDKGDENTVI DLGSKRQYAD CSEIFNDGYKL

SGFYKIKPLQ SPAEFSVYCD MSDGGGWTVI QRRSDGSENF NRGWKDYENG FGNFVQKHGE YWLGNKNLHF LTTQEDYTLK IDLADFEKNS RYAQYKNFKV GDEKNFYELN IGEYSGTAGD SLAGNFHPEV QWWASHQRMK FSTWDRDHDN YEGNCAEEDQ SGWWFNRCHS ANLNGVYYSG PYTAKTDNGI VWYTWHGWWY SLKSVVMKIR

PNDFIPNVIA HHHHHHHHH

Predicted Molecular Mass: 35.5 kDa Species: Human

Formulation: Lyophilized from sterile 20 mM Tris, 300 mM NaCl, 10% glycerol, pH 8. Trehalose (5 - 8%), mannitol, and

0.01% TWEEN® 80 are normally added as protectants before lyophilization.

Source: Baculovirus-insect cells

### Specifications

Activity: Not available

Purity:  $\geq 87\%$ 

Endotoxin Level: Measured by kinetic Limulus amebocyte lysate (LAL) analysis and is  $\leq$  1 EU/ $\mu$ g protein.

### Preparation and Storage

Storage: Store at -20 to -80°C.

Stability: Stable as supplied for 12 months from date of receipt.

Preparation: Centrifuge vial before opening. Reconstitute the product in sterile water to at least 0.25 mg/mL by pipetting the

solution down the sides of the vial. Do not vortex. As a general guide, do not store at 2 - 8°C for more than

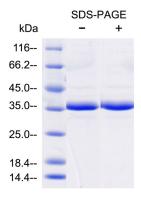
1 month or at -80°C for more than 3 months. Avoid repeated freeze-thaw cycles.

## **Cytokines**

#### **Human Recombinant Hepassocin**



### Data



Human Recombinant Hepassocin was resolved with SDS-PAGE under reducing (+) and non-reducing (-) conditions and visualized by Coomassie Blue staining. Human Recombinant Hepassocin has a predicted molecular mass of 35.5 kDa.

#### Related Products

For a complete list of cytokines, as well as related products available from STEMCELL Technologies, visit www.stemcell.com/cytokines, or contact us at techsupport@stemcell.com.

#### References

Du H et al. (2020) The co-expression characteristics of LAG3 and PD-1 on the T cells of patients with breast cancer reveal a new therapeutic strategy. Int Immunopharmacol 78: 106113.

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Liu Z & Ukomadu C. (2008) Fibrinogen-like protein 1, a hepatocyte derived protein is an acute phase reactant. Biochem Biophys Res Commun 365(4): 729–34.

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Zhang Y et al. (2018) Fibrinogen-like-protein 1 promotes the invasion and metastasis of gastric cancer and is associated with poor prognosis. Mol Med Rep18(2):1465–72.

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