NEUROMICS

ISOKine™ Recombinant Human LIF Datasheet

Catalog Number: PR800003 **Product Type:** Recombinant Protein

Source: ISOkine™ recombinant human LIF is produced in the endosperm tissue of barley grain (Hordeum vulgare), that exhibits up to 50 times less protease activity than *E.coli* or mammalian cells. **Barley seed is void of any human or animal viral contaminants that could jeopardize your cell culture**.

Description/Molecular Mass: Recombinant human LIF contains 188 amino acids and a 16 a.a. Histidine-based tag for a total length of 204 a.a. and has a predicted molecular mass of 22.8 kDa. As a result of glycosylation, the recombinant protein migrates with an apparent molecular mass of 28-30 kDa in SDS-PAGE.

Activity: Each batch of ISOkine™ growth factor is tested for bioactivity and verified to have comparable activity to a commercial source. The bioactivity of ISOkine™ human LIF was determined by its ability to induce proliferation of TF-1cells in a dose dependent manner. The ED50 value for this effect is typically below 0.4 ng/ml corresponding to specific activity of >2.5 x 10e6 U/mg. Optimal concentration should be determined for specific applications and cell lines.

Endotoxin Level: Endotoxin Endotoxin level is less than 0.005ng per µg of ISOkine™ product (0.05EU/µg) as measured by turbidimetric kinetic assay.* * Ref. Associates of Cape Cod Industries, Deacon Park, Knowsley, Liverpool, UK

MAT Assay: Purified ISOkine™ product carries no pyrogenic or pro-inflammatory contaminants, as assayed with monocyte activation test using Human 10-plex Cytokine Assay measuring IL-6 TNF-alpha and IL-1beta induction.**** **** Ref. The Blood Bank, University Hospital of Iceland, Reykjavik, Iceland

Purity: Greater than 95% by SDS-PAGE gel analysis

Format: Lyophilized, PBS, pH 7.2, sterile filtered.

Reconstitution: Always centrifuge the vial before opening. It is recommended to reconstitute the lyophilized protein in sterile water to a concentration of no less than 100 µg/ml. For long term storage it recommended to add a carrier protein (0.1% HSA or BSA).

Storage: 12 months from date of receipt, -20 to 70°C as supplied.
1 month, 2 to 8 °C under sterile conditions after reconstitution.
3 months, -20 to 70 °C under sterile conditions after reconstitution.
Avoid multiple freeze-thaw cycles.

FOR RESEARCH USE ONLY

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