



## ISOKine<sup>™</sup> 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.** 

Recombinant human LIF contains 188 amino acids and a 16 a.a. Histidine-based tag for a **Description/Molecular** total length of 204 a.a. and has a predicted molecular mass of 22.8 kDa. As a result of

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.

Mass:

**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

Neuromics' reagents are for in vitro and certain non-human in vivo experimental use only and not intended for use in any human clinical investigation, diagnosis, prognosis, or treatment. The above analyses are merely typical guides. They are not to be construed as being specifications. All of the above information is, to the best of our knowledge, true and accurate. However, since the conditions of use are beyond our control, all recommendations or suggestions are made without guarantee, express or implied, on our part. We disclaim all liability in connection with the use of the information contained herein or otherwise, and all such rsks are assumed by the user. We further expressly disclaim all warranties of MERCHANTABILITY and FITNESS FOR A PARTICULAR PURPOSE.-V1-032015