Recombinant Human Follistatin-like 5/FSTL5

Catalog Number: 9066-FN

DESCRIPTION

Source	Chinese Hamster Ovary cell line, CHO-derived Arg21-Ala847, with a C-terminal 6-His tag Accession # AAH36502
N-terminal Sequence Analysis	Arg21
Predicted Molecular Mass	94 kDa

SPECIFICATIONS

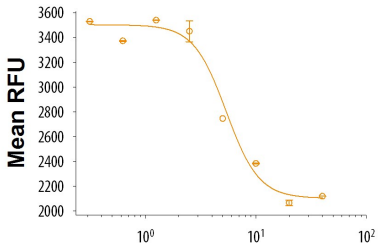
SDS-PAGE	86-102 kDa, reducing conditions
Activity	Measured by its ability to inhibit Hep3B human hepatocellular carcinoma cell survival. The ED_{50} for this effect is typically 3-12 µg/mL.
Endotoxin Level	<0.10 EU per 1 µg of the protein by the LAL method.
Purity	>90%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 500 µg/mL in PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
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. ● 3 months, -20 to -70 °C under sterile conditions after reconstitution.

DATA

Bioactivity



Recombinant Human Follistatin-like 5/FSTL5 (Catalog # 9066-FN) inhibits Hep3B human hepatocellular carcinoma cell survival. The ED_{50} for this effect is typically 3-12 µg/mL.

BACKGROUND

Follistatin-like 5 (FSTL5) is a secreted 94 kDa (predicted) member of the SPARC protein family (1). In its N-terminal half, FSTL5 contains a Kazal-like domain, two EF-hand domains, and two Ig-like domains. Mature human FSTL5 shares 91% amino acid sequence identity with mouse and rat FSTL5. Alternative splicing generates an isoform with a 10 residue deletion following the second Ig-like domain. FSTL5 is expressed in the cartilage and tendon of developing digits and the shafts of long bones (2). In the brain it is expressed in the olfactory bulb, CA3 area of the hippocampus, and granule cell layer of the cerebellum (3). FSTL5 inhibits the proliferation and promotes the apoptosis of hepatocellular carcinoma cells (4). Its expression in medulloblastoma and down-regulation in hepatocellular carcinoma are associated with poor prognosis (4, 5).

References:

1. Bradshaw, A.D. (2012) Int. J. Biochem. Cell Biol. **44**:480.
2. Lorda-Diez, C.I. *et al.* (2013) PLoS One **8**:e60423.
3. Masuda, T. *et al.* (2014) Congenit. Anom. (Kyoto) **54**:63.
4. Zhang, D. *et al.* (2015) Int. J. Clin. Exp. Pathol. **8**:3386.
5. Remke, M. *et al.* (2011) J. Clin. Oncol. **29**:3852.

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