

Recombinant Murine SF-20/MYDGF

#R00231

Size: 10 µg/100 µg/500 µg

Stability & Storage

Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- A minimum of 12 months from date of receipt, when stored at ≤ -20 °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.



Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

Background

Myeloid-derived growth factor (MYDGF) is a paracrine-acting protein produced by bone marrow-derived monocytes and macrophages to protect and repair the heart after myocardial infarction (MI). MYDGF is strongly expressed in the prostate, spleen, and lung, but weakly expressed in the left ventricle and liver. It is predominantly expressed in inflammatory cells such as monocytes and macrophages, with weak expression observed in neutrophils, T-cells, B-cells, endothelial cells, and cardiac myocytes at the protein level after MI. The protein level of MYDGF increases during ischemia/hypoxia/reperfusion injury in the left ventricle, and adipocyte differentiation. MYDGF stimulates endothelial cell proliferation through a MAPK1/3-, STAT3-, and CCND1-mediated signaling pathway, and inhibits cardiac myocyte apoptosis via a PI3K/AKT-dependent signaling pathway.

AA Sequence

MVSEPTTVPFDVPRGGVVHSFSQDVGPNGKFTCTFT
YASQGGTNEQWQMSLGTSEDSQHFTCTIWRPQGKS
YLYFTQFKAELRGAEIEYAMAYSKAAFERESDVPLKS
EEFEVTKTAVSHRPGAFKAELSKLVIVAKAARSEL

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1% BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.

Product Specification

Synonyms	Il25, Ly6elg, D17Wsu104e
Accession	Q9CPT4
GeneID	28106
Species	Murine
Source	Escherichia coli.
Molecular Weight	Approximately 15.8 kDa, a single non-glycosylated polypeptide chain containing 143 amino acids.
Purity	> 95% by SDS-PAGE and HPLC analyses.
Biological Activity	Data Not Available.
Physical Appearance	Sterile Filtered White Lyophilized (freeze-dried) powder.
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.

Endotoxin	Less than 1 EU/μg of rMuSF-20/MYDGF as determined by LAL method.
Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
