## **PrimeGene** a biotechne brand

## Recombinant Murine SF-20/MYDGF (rMuSF-20/MYDGF)

## **PrimeGene Technical DataSheet**

Catalog Number:	121-25
Source:	Escherichia coli
Molecular Weight:	Approximately 15.8 kDa, a single non-glycosylated polypeptide chain containing 143 amino acids.
Size:	10 μg/100 μg/500 μg/1 mg
AA Sequence:	MVSEPTTVPF DVRPGGVVHS FSQDVGPGNK FTCTFTYASQ GGTNEQWQMS
	LGTSEDSQHF TCTIWRPQGK SYLYFTQFKA ELRGAEIEYA MAYSKAAFER
	ESDVPLKSEE FEVTKTAVSH RPGAFKAELS KLVIVAKAAR SEL
Purity:	> 95% by SDS-PAGE and HPLC analyses.
<b>Biological Activity:</b>	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.
<b>Reconstitution:</b>	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 $\leq$ -20 °C. Further dilutions should be made in appropriate buffered solutions.
Shipping:	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
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 $\leq$ -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.
Usage:	This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory or further
	evaluation purposes. NOT FOR HUMAN USE.

## Murine SF-20/MYDGF

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.

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