

Recombinant Human MYDGF Protein (His Tag)

Catalog Number: PKSH032635

Note: Centrifuge before opening to ensure complete recovery of vial contents.

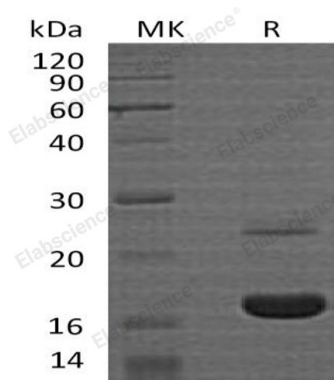
Description

Species	Human
Source	E.coli-derived Human MYDGF protein Ser33-Leu173, with an N-terminal His
Calculated MW	18.0 kDa
Observed MW	17 kDa
Accession	Q969H8
Bio-activity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution of 4mM HCl. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Myeloid-derived growth factor (MYDGF) is a secreted protein which belongs to the UPF0556 family. MYDGF was strongly expressed in spleen, prostate and lung, and weakly expressed in the left ventricle and liver. Bone marrow-derived monocyte and paracrine-acting protein promotes cardiac myocyte survival and adaptive angiogenesis for cardiac protection and/or repair after myocardial infarction (MI). MYDGF stimulates endothelial cell proliferation through a MAPK1/3-, STAT3- and CCND1-mediated signaling pathway. It inhibits cardiac myocyte apoptosis in a PI3K/AKT-dependent signaling pathway. MYDGF is involved in endothelial cell proliferation and angiogenesis. It may serve as a prototypical example for the development of protein-based therapies for ischemic tissue repair.

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