

# Recombinant Human MYDGF Protein (His Tag)

Catalog Number: PKSH032635

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

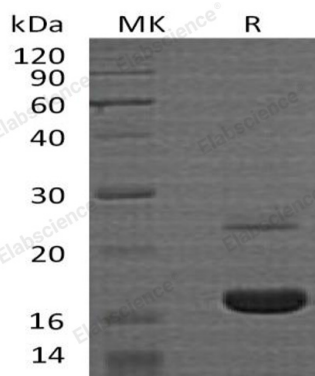
## Description

<b>Species</b>	Human
<b>Mol_Mass</b>	18.0 kDa
<b>Accession</b>	Q969H8
<b>Bio-activity</b>	Not validated for activity

## Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	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.
<b>Reconstitution</b>	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.

## For Research Use Only