

Recombinant Human Mfn2 protein (His Tag)

Catalog Number: PDEH101037

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

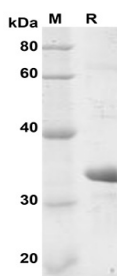
Description

Species	Human
Source	E.coli-derived Human Mfn2 protein Gln350-Met600, with an N-terminal His & C-terminal His
Calculated MW	27.5 kDa
Observed MW	34 kDa
Accession	O95140
Bio-activity	Not validated for activity

Properties

Purity	> 90% as determined by reducing SDS-PAGE.
Endotoxin	< 10 EU/mg 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 in PBS with 5% Trehalose and 5% Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

Data



SDS-PAGE analysis of Human Mfn2 proteins, 2µg/lane of Recombinant Human Mfn2 proteins was resolved with SDS-PAGE under reducing conditions, showing bands at 34 KD.

Background

Mitofusin 2 (MFN2) is a GTPase dynamin-like protein of the outer mitochondrial membrane, encoded in the nuclear genome by the MFN2 gene located on the short (p) arm of chromosome 1. MFN2 is an important transmembrane GTPase in the mitochondrial outer membrane and it can block cells in the G0/G1 stage of the cell cycle. MFN2 protein is involved in several intracellular pathways but is mainly involved in a network that has an essential role in several mitochondrial functions, including fusion, axonal transport, interorganellar communication, and mitophagy. Mitofusin 2 (Mfn2) is a key protein in mitochondrial fusion and it participates in the bridging of mitochondria to the endoplasmic reticulum (ER). Recent data indicate that Mfn2 ablation leads to ER stress. Mitofusin-2 (MFN2) deficiency in trophoblastic cells is an important cause for early miscarriage. MFN2 can regulate mitochondrial autophagy. Several reports show that MFN2 is a target of different miRNAs.