

Product Information

MemDX™ Membrane Protein Human MIEF1 (Mitochondrial elongation factor 1) for Antibody

Discovery

Cat. No.: **MP0305J**

This product is for research use only and is not intended for diagnostic use.

This product is a 51.1 kDa Human MIEF1 membrane protein expressed in HEK293T. The protein is for research use only and is not approved for use in humans or in clinical diagnosis.

Product Specifications

Host Species

Human

Target Protein

MIEF1

Protein Length

Full-length

Protein Class

Transmembrane

Molecular Weight

51.1 kDa

TMD

1

Sequence

MAGAGERKGGKDDNGIGTAIDFVLSNARLVLGVGGAAMLGIATLAVKRMVDRAISAPTSPTRLSHSGKRS
WEEPNNWGMGSPRLLNRDMKTGLSRSLQTLPTDSSSTFDTDTCPPRPKPVARKGQVDLKKSRRLRMSLQEKL
TYYRNRAAIPAGEQARAKQAAVDICAELRSFLRAKLPDMPLRDMYLSGSLYDDLQVVTADHIQLIVPLVL
EQNLWSCIPGEDTIMNVPGFFLVRRENPEYFPRGSSYWDRCVVGGYLSPKTVADTFEKVVAGSINWPAIG
SLLDYVIRPAPPPEALTLEVQYERDKHLFIDFLPSVTLGDTVLVAKPHRLAQYDNLWRLSLRPAETARLR
ALDQADSGCRSLCLKILKAICKSTPALGHLTASQLTNVILHLAQEEADWSPDMLADRFLQALRGLISYLE
AGVLPALNPKVNLFAELTPEEIDELGYTLYCSLSEPEVLLQT

Product Description

Expression Systems

HEK293T

Tag

C-Myc/DDK

Form

Liquid

Purification

Anti-DDK affinity column followed by conventional chromatography steps

Purity

> 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer

25 mM Tris.HCl, pH 7.3, 100 mM glycine, 10% glycerol

Storage

Store at +4°C for up to one week or several months at -80°C

Target**Target Protein**

MIEF1

Full Name

Mitochondrial elongation factor 1

Introduction

Mitochondrial outer membrane protein which regulates mitochondrial fission. Promotes the recruitment and association of the fission mediator dynamin-related protein 1 (DNM1L) to the mitochondrial surface independently of the mitochondrial fission FIS1 and MFF proteins. Regulates DNM1L GTPase activity and DNM1L oligomerization. Binds ADP and can also bind GDP, although with lower affinity. Does not bind CDP, UDP, ATP, AMP or GTP. Inhibits DNM1L GTPase activity in the absence of bound ADP. Requires ADP to stimulate DNM1L GTPase activity and the assembly of DNM1L into long, oligomeric tubules with a spiral pattern, as opposed to the ring-like DNM1L oligomers observed in the absence of bound ADP. Does not require ADP for its function in recruiting DNM1L.

Alternative Names

MID51; SMCR7L; AltMIEF1; HSU79252; MIEF1-MP; dJ1104E15.3

Gene ID

[54471](#)

UniProt ID

[Q9NQG6](#)