

# 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

MAGAGERKGKKDDNGIGTAIDFVLSNARLVLGVGGAAMLGIATLAVKRMYDRAISAPTSPTRLSHSGKRS  
WEEPNWMGSPRLLNRDMKTGLSRSLQTLPTDSSTFDTFCPPRPKVARKGQVDLKKSRLRMSLQEKL  
TYYRNRAAIPAGEQARAKQAADVICAELRSFLRAKLPDMPLRDMYLSGSYDDLQVVTADHIQLIVPLVL  
EQNLWSCIPGEDTIMNVPGFFLVRRENPEYFPRGSSYWDRCVGGYLSPKTVADTKEKVVAGSINWPAIG  
SLLDYVIRPAPPPEALTLEVQYERDKHLFIDFLPSVTLGDTVLVAKPHRLAQYDNLWRLSLRPAETARLR  
ALDQADSGCRSLCLKILKAICKSTPALGHTASQLTNVILHLAQEEADWSPDMLADRFLQALRGLISYLE  
AGVLPSALNPKVNLFAELTPEEIDELGYTLYCSLSEPEVLLQT

### 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](#)