

# Product Information

## MemDX™ Membrane Protein Human MPEG1 (Macrophage expressed 1)

Cat. No.: **MP0245J**

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

This product is a 78.4 kDa Human MPEG1 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

MPEG1

#### Protein Length

Full-length

#### Protein Class

Transmembrane

#### Molecular Weight

78.4 kDa

#### TMD

1

#### Sequence

MNNFRATILFWAAA WAKSGKPSGEMDEVGVQKCKNALKLPVLEVLPGGGWDNLRNVD MGRVMELTYSNC  
RTTEDGQYIIPDEIFTIPQKQSNLEMNSEILES WANYQSSTSYSINTELSLFSKVNGKFSTEFQRMKTLQ  
VKDQAITTRVQVRNLVYTVKINPTLELSSGFRKELDISDRLENNQTRMATYLAELLVLNYGTHVTTTSVD  
AGAALI QEDHLRASFLQDSQSSRS AVTASAGLAFQNTVNFKFEENYTSQNVLT KSYLSNRTNSRVQSIGG  
VPFYPGITLQAWQQG GITNHLVAIDRSG LPLHFFINPNMLPDLPGPLVKKVSKTVETAVKRYTTFNTYPCG  
TDLNSPNFNFQANTDDGSCEGKMTNFSFGGVYQECTQLSGNRDVLLCQKLEQKNPLTGDFSCPSGYSPVH  
LLSQIHEEGYNHLECHRKCTLLVFCKTVCEDVFQVAKAEFRAFVCVASSQVPENSGLLFGGLFSSKSINP  
MTNAQSCPAGYFPLRLFENLKVCVSQDYELGSRFAVPFGGFFSCTVGNPLVDP AISRDLGALSLKKCPGG  
FSQH PALISDGCQVS YCVKSGLFTGGSLPPARLPFTRPPLMSQAATNTVIVTNS ENARSWIKDSQTHQW  
RLGEPIELRRAMNVIHGDGGGLSGGAAAGVTGVTTILAVVITLAIYGTRKFKKKAYQAIEERQSLVPGT  
AATGDTTYQEQQGSPA

### 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**

MPEG1

**Full Name**

Macrophage expressed 1

**Introduction**

Plays a key role in the innate immune response following bacterial infection by inserting into the bacterial surface to form pores. By breaching the surface of phagocytosed bacteria, allows antimicrobial effectors to enter the bacterial periplasmic space and degrade bacterial proteins such as superoxide dismutase sodC which contributes to bacterial virulence. Shows antibacterial activity against a wide spectrum of Gram-positive, Gram-negative and acid-fast bacteria. Reduces the viability of the intracytosolic pathogen *L.monocytogenes* by inhibiting acidification of the phagocytic vacuole of host cells which restricts bacterial translocation from the vacuole to the cytosol. Required for the antibacterial activity of reactive oxygen species and nitric oxide.

**Alternative Names**

P-2; MPG1; MPS1; Mpg-1; macrophage expressed gene 1; macrophage gene 1 protein; perforin 2

**Gene ID**

[219972](#)

**UniProt ID**

[Q2M385](#)