

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
VKDQAITTRVQVRNLVYTVKINPTLELSSGFRKELDISDRLENNQTRMATYLAELLVLNYGTHVTTSD
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](#)