

## Product Information

### MemDX™ Membrane Protein Human PCDHGA1 (Protocadherin gamma subfamily A, 1) Full

#### Length

Cat. No.: **MPC3027K**

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

This product is a made-to-order Human PCDHGA1 membrane protein expressed in HEK293. 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

PCDHGA1

##### Protein Length

Full length

##### Protein Class

Cell adhesion

##### TMD

1

##### Sequence

MKIQKKLTGCSRLMLLCLSLELLLEAGAGNIHYSVPEETDKGSFVGNIAK  
DLGLQPQELADGGVRIVSRGRMPLFALNPRSGSLITARRIDREELCAQSM  
PCLVSFNILVEDKMKLFPVEVEIIDINDNTPQFQLEELFKMNEITTPGT  
RVSLPFGQDLVDGMNSLQSYQLSSNPFSLDVQQGADGPQHPEMVLQSPL  
DREEEAVHHLILTASDGGEPVRSGLRRIYIQVVDANDNPPAFTQAQYHIN  
VPENVPLGTQLLMVNATDPDEGANGEVTYSFHNVDHRVAQIFRLDSYTGE  
ISNKEPLDFEYKMYSMQVQAQDGAGLMAKVKVLKVLVDVNDNAPEVTIT  
SVTTAVPENFPPTIIALISVHDQDSGDNGYTTTCFIPGNLFPKLEKLVND  
YYRLVTERTLRELISGYNITITAIQDQTPALSTETHISLLVTDINDNSP  
VFHQDSYSAYIPENNPRGASIFSVRAHDLDSNENAQITYSLIEDTIQGAP  
LSAYLSINSDTGVLALRSFDYEQFRDMLKVMARDSGDPPLSSNVLSL  
FLLDQNDNAPEILYPALPTDGSTGVELAPLSAEPGYLVTKVAVDRDSGQ  
NAWLSYRLLKASEPGLFSVGLHTGEVRTARALLDRDALKQSLVAVQDHG  
QPPLSATVTLTVAVADRISDILADLGSLEPSAKPNDSDLTYLVVAAAAV  
SCVFLAFVIVLLAHLRRLRWHSRLLQASGGGLASMPGSHFVGVGVDGVRFL  
QTYSHEVSLTADSRKSHLIFPQPNYADTLISQESCEKKGFLSAPQSLLD  
KKEPFSQAPPNTDWRFSQAQRPGTSGSQNGDDTGTWPNNQFDTEMLQAM  
ILASASEAADGSSTLGGGAGTMGLSARYGPQFTLQHVDPDYRQNVYIPGSN  
ATLTNAAGKRDGKAPAGGNGNKKKSGKKEKK

## Product Description

### Expression Systems

HEK293

### Tag

Based on specific requirements

### Protein Format

Detergent or based on specific requirements (Detergent, Liposome, Nanodisc, Polymer, VLP)

### Form

Liquid

### Storage

Aliquot and store at -20°C or lower. For long term storage, we recommend to store at -72°C or lower. Avoid freeze/thaw cycles.

## Target

### Target Protein

PCDHGA1

### Full Name

Protocadherin gamma subfamily A, 1

### Introduction

This gene is a member of the protocadherin gamma gene cluster, one of three related clusters tandemly linked on chromosome five. These gene clusters have an immunoglobulin-like organization, suggesting that a novel mechanism may be involved in their regulation and expression. The gamma gene cluster includes 22 genes divided into 3 subfamilies. Subfamily A contains 12 genes, subfamily B contains 7 genes and 2 pseudogenes, and the more distantly related subfamily C contains 3 genes. The tandem array of 22 large, variable region exons are followed by a constant region, containing 3 exons shared by all genes in the cluster. Each variable region exon encodes the extracellular region, which includes 6 cadherin ectodomains and a transmembrane region. The constant region exons encode the common cytoplasmic region. These neural cadherin-like cell adhesion proteins most likely play a critical role in the establishment and function of specific cell-cell connections in the brain. Alternative splicing has been described for the gamma cluster genes.

### Alternative Names

PCDHGA1; PCDH-GAMMA-A1; protocadherin gamma-A1; Protocadherin gamma subfamily A, 1

### Gene ID

[56114](#)

### UniProt ID

[Q9Y5H4](#)