

# Product Information

## **MemDX™ Membrane Protein Human KDELR1 (KDEL endoplasmic reticulum protein retention receptor 1) Full Length**

Cat. No.: **MPC2212K**

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

This product is a 24.5 kDa Human KDELR1 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

KDELR1

#### Protein Length

Full length

#### Protein Class

Transporter

#### Molecular Weight

24.5 kDa

#### TMD

7

#### Sequence

MNLFRFLGDLSHLLAIILLKKIWKSRSCAGISGKSQVLFAVVFTARYLD  
LFTNYISLYNTCMKVVIYACSFTTVWLIYSKFKATYDGNHDTFRVEFLVV  
PTAILAFLVNHDFTPLEILWTFISIYLESVAILPQLFMVSKTGEAETITSH  
YLFALGVYRTLYLFNWIWRYHFEGFFDLIAIVAGLVQTVLYCDDFFLYIT  
KVLKGKKLSLPA

### Product Description

#### Expression Systems

HEK293

#### Tag

Based on specific requirements

#### Protein Format

Detergent or based on specific requirements

**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**

KDELRL1

**Full Name**

KDEL endoplasmic reticulum protein retention receptor 1

**Introduction**

Retention of resident soluble proteins in the lumen of the endoplasmic reticulum (ER) is achieved in both yeast and animal cells by their continual retrieval from the cis-Golgi, or a pre-Golgi compartment. Sorting of these proteins is dependent on a C-terminal tetrapeptide signal, usually lys-asg-glu-leu (KDEL) in animal cells, and his-asg-glu-leu (HDEL) in *S. cerevisiae*. This process is mediated by a receptor that recognizes, and binds the tetrapeptide-containing protein, and returns it to the ER. In yeast, the sorting receptor encoded by a single gene, ERD2, which is a seven-transmembrane protein. Unlike yeast, several human homologs of the ERD2 gene, constituting the KDEL receptor gene family, have been described. The protein encoded by this gene was the first member of the family to be identified, and it encodes a protein structurally and functionally similar to the yeast ERD2 gene product.

**Alternative Names**

KDELRL1; ERD2; HDEL; PM23; ERD2.1; ER lumen protein-retaining receptor 1; KDEL (Lys-Asp-Glu-Leu) endoplasmic reticulum protein retention receptor 1; KDEL receptor 1; putative MAPK-activating protein PM23; KDEL endoplasmic reticulum protein retention receptor 1

**Gene ID**

[10945](#)

**UniProt ID**

[P24390](#)