

## Product Information

### MemDX™ Membrane Protein Human AUP1 (AUP1 lipid droplet regulating VLDL assembly factor) Full Length

Cat. No.: **MPC3484K**

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

This product is a made-to-order Human AUP1 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

AUP1

##### Protein Length

Full length

##### Protein Class

Receptor

##### TMD

1

##### Sequence

MELPSGPGPERLFDSHRLPGDCFLLLVLLLYAPVGFCLLVLRFLGLIHVF  
LVSCALPDSVLRFRFVVRTMCAVLGLVARQEDSGLRDHSDVRVLISNHVTPF  
DHNIVNLLTTCSTPLLNSPPSFVCWSRGFMEMNGRGELVESLKRFCSTR  
LPPTPLLLFPEEEATNGREGLLRFSWPFSIQDVVQPLTLQVQRPLVSVT  
VSDASWVSELLWSLFVPFTVYQVRWLRPVHRQLGEANEFFALRVQQLVAK  
ELGQTGTRLTPADKAEHMKRQRHPRLRPQSAQSSFPSPGSPDPVQLATL  
AQRVKEVLPHVPLGVIQRDLAKTGCVDLTITNLLGAVAFMPEDITKGTQ  
SLPTASASKFPSSGPVTPQPTALTFAKSSWARQESLQERKQALYHEYARRR  
FTERRAQEAD

#### 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**

AUP1

**Full Name**

AUP1 lipid droplet regulating VLDL assembly factor

**Introduction**

The protein encoded this gene is involved in several pathways including quality control of misfolded proteins in the endoplasmic reticulum and lipid droplet accumulation. Lipid droplets are organelles in the cytoplasm that store neutral lipids such as cholesterol esters and triglycerides to prevent the overabundance of free cholesterol and fatty acids in cells, but also to act as storage for other metabolic processes, such as membrane biogenesis. Reduced expression of this gene results in reduced lipid droplet clustering, a function that is dependent on ubiquitination of the protein. This protein contains multiple domains including a hydrophobic N-terminal domain, an acetyltransferase domain, a ubiquitin-binding CUE domain, and a UBE2B2-binding domain (G2BR). Alternative splicing results in multiple transcript variants.

**Alternative Names**

AUP1; lipid droplet-regulating VLDL assembly factor AUP1; ancient ubiquitous protein 1; AUP1 lipid droplet regulating VLDL assembly factor

**Gene ID**

[550](#)

**UniProt ID**

[Q9Y679](#)