Data Sheet (Cat.No.TMPY-03854)

TargetMol

TMED4 Protein, Human, Recombinant (His)

General Information

Synonyms:	GMP25iso;p24alpha3;transmembrane emp24 protein transport domain containing 4;p24α3;ERS25;HNLF
Protein Construction:	A DNA sequence encoding the human TMED4 (Q7Z7H5-1) (Met1-Arg194) was expressed with a polyhistidine tag at the C-terminus. Predicted N terminal: Leu 30
Species:	Human
Expression Host:	HEK293 Cells
Accession:	Q7Z7H5-1
Molecular Weight:	20.7 kDa (predicted); 23 kDa (reducing conditions)

QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 85 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS, 10% Glycerol, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

TMED4, also known as ERS25, belongs to the EMP24/GP25L family. TMED4 may play a role in the regulation of heat-shock response and apoptosis. It is involved in vesicular protein trafficking, mainly in the early secretory pathway. TMED4 may also play a role in the biosynthesis of secreted cargo including processing. It functions in the regulation of heat-shock response and apoptosis. TMED4 also is involved in endoplasmic reticulum stress

response.

Reference

Hartley JL. et al., 2001, Genome Res. 10 (11): 1788-95.
Matoba R. et al., 1994, Gene. 146 (2): 199-207.
Matsuda A. et al., 2003, Oncogene. 22 (21): 3307-18.