

## Product datasheet for PH305880

### KDEL Receptor (KDEL1) (NM\_006801) Human Mass Spec Standard

#### Product data:

Product Type:	Mass Spec Standards
Description:	KDEL1 MS Standard C13 and N15-labeled recombinant protein (NP_006792)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC205880
Predicted MW:	24.5 kDa
Protein Sequence:	>RC205880 protein sequence Red=Cloning site Green=Tags(s)  MNLFRFLGDLSHLLAIIILLKKIWKSRSCAGISGKSQVLFVAVFTARYLDLFTNYISLYNTCMKVYIAC SFTTVWLIYSKFKATYDGNHDTFRVEFLVPTAILAFLVNHDFPLEILWTFISIYLESVAILPQLFMVSK TGEAETITSHYLFALGVYRTLFLFNWIWRYHFEGFFDLIAIVAGLVQTVLYCDFFLYITKVLKGGKLSL PA  TRTRPLEQKLI SEEDLAANDILDYKDDDDKV
Tag:	C-Myc/DDK
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>4</sub> ]-L-Arginine and [U- <sup>13</sup> C <sub>6</sub> , <sup>15</sup> N <sub>2</sub> ]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	<a href="#">NP_006792</a>
RefSeq Size:	1575
RefSeq ORF:	636
Synonyms:	ERD2; ERD2.1; HDEL; PM23
Locus ID:	10945
UniProt ID:	<a href="#">P24390</a>



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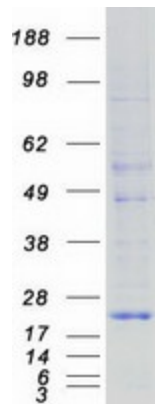
**Cytogenetics:** 19q13.33

**Summary:** 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-asp-glu-leu (KDEL) in animal cells, and his-asp-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. [provided by RefSeq, Jul 2008]

**Protein Families:** Druggable Genome, Transmembrane

**Protein Pathways:** Vibrio cholerae infection

### Product images:



Coomassie blue staining of purified KDEL1 protein (Cat# [TP305880]). The protein was produced from HEK293T cells transfected with KDEL1 cDNA clone (Cat# [RC205880]) using MegaTran 2.0 (Cat# [TT210002]).