

KDEL2 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP14724b**Specification**

KDEL2 Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [P33947](#)**KDEL2 Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 11014**Other Names**

ER lumen protein-retaining receptor 2, ERD2-like protein 1, ELP-1, KDEL endoplasmic reticulum protein retention receptor 2, KDEL receptor 2, KDEL2, ERD22

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

KDEL2 Antibody (C-term) Blocking Peptide - Protein Information**Name** KDEL2**Synonyms** ERD2.2 {ECO:0000303|PubMed:1325562}**Function**

Membrane receptor that binds the K-D-E-L sequence motif in the C-terminal part of endoplasmic reticulum resident proteins and maintains their localization in that compartment by participating to their vesicle-mediated recycling back from the Golgi (PubMed:1325562, PubMed:18086916, PubMed:33053334). Binding is pH dependent, and is optimal at pH 5-5.4 (By similarity).

Cellular Location

Endoplasmic reticulum membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q5ZKX9}. Golgi apparatus membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q5ZKX9}. Cytoplasmic vesicle, COPI-coated vesicle membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q5ZKX9} Note=Localized in the Golgi in the absence of bound proteins with the sequence motif K-D-E-L. Trafficks back to the endoplasmic reticulum together with cargo proteins containing the sequence motif K-D-E-L

KDEL2 Antibody (C-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

KDEL2 Antibody (C-term) Blocking Peptide - Images

KDEL2 Antibody (C-term) Blocking Peptide - Background

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 pre-Golgi compartment. Sorting of these proteins is dependent on a C-terminal tetrapeptide signal, usually lys-asn-glu-leu (KDEL) in animal cells, and his-asn-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, is a seven-transmembrane protein. Unlike yeast, several human homologs of the ERD2 gene, constituting the KDEL receptor gene family, have been described. KDEL2 was the second member of the family to be identified, and it encodes a protein which is 83% identical to the KDEL1 gene product. Alternative splicing results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq].

KDEL2 Antibody (C-term) Blocking Peptide - References

van der Vlies, D., et al. Biochem. J. 366 (PT 3), 825-830 (2002) ; Pelham, H.R. Cell Struct. Funct. 21(5):413-419 (1996) ; Lewis, M.J., et al. J. Mol. Biol. 226(4):913-916 (1992) ; Hsu, V.W., et al. Cell 69(4):625-635 (1992)