

KDEL3 Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP13180a**Specification**

KDEL3 Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [O43731](#)**KDEL3 Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 11015**Other Names**

ER lumen protein-retaining receptor 3, KDEL endoplasmic reticulum protein retention receptor 3, KDEL receptor 3, KDEL3

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP13180a was selected from the N-term region of KDEL3. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

KDEL3 Antibody (N-term) Blocking Peptide - Protein Information**Name** KDEL3**Synonyms** ERD23 {ECO:0000303|PubMed:18086916}**Function**

Receptor for the C-terminal sequence motif K-D-E-L that is present on endoplasmic reticulum resident proteins and that mediates their recycling from the Golgi back to the endoplasmic reticulum.

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

KDEL3 Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

KDEL3 Antibody (N-term) Blocking Peptide - Images

KDEL3 Antibody (N-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-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, is a seven-transmembrane protein. Unlike yeast, several human homologs of the ERD2 gene, constituting the KDEL receptor gene family, have been described. KDEL3 was the third member of the family to be identified, and it encodes a protein highly homologous to KDEL1 and KDEL2 proteins. Two transcript variants of KDEL3 that arise by alternative splicing, and encode different isoforms of KDEL3 receptor, have been described.

KDEL3 Antibody (N-term) Blocking Peptide - References

Collins, J.E., et al. Genome Biol. 5 (10), R84 (2004) ; Collins, J.E., et al. Genome Res. 13(1):27-36(2003) Dunham, I., et al. Nature 402(6761):489-495(1999) Pelham, H.R. Cell Struct. Funct. 21(5):413-419(1996)