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KDELR2 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP14724b

Specification

KDELR2 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession P33947

KDELR2 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, KDELR2, 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.

KDELR2 Antibody (C-term) Blocking Peptide - Protein Information

Name KDELR2

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

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KDELR2 Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

KDELR2 Antibody (C-term) Blocking Peptide - Images

KDELR2 Antibody (C-term) Blocking Peptide - Background

Retention of resident soluble proteins in the lumen of theendoplasmic reticulum (ER) is achieved in both yeast and animalcells by their continual retrieval from the cis-Golgi, or apre-Golgi compartment. Sorting of these proteins is dependent on aC-terminal tetrapeptide signal, usually lys-asp-glu-leu (KDEL) inanimal cells, and his-asp-glu-leu (HDEL) in S. cerevisiae. Thisprocess is mediated by a receptor that recognizes, and binds thetetrapeptide-containing protein, and returns it to the ER. Inyeast, the sorting receptor encoded by a single gene, ERD2, is aseven-transmembrane protein. Unlike yeast, several human homologsof the ERD2 gene, constituting the KDEL receptor gene family, havebeen described. KDELR2 was the second member of the family to beidentified, and it encodes a protein which is 83% identical to theKDELR1 gene product. Alternative splicing results in multipletranscript variants encoding distinct isoforms. [provided byRefSeq].

KDELR2 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)