

KDEL Receptor Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP56471

Product Information

Application WB, IHC-P, IHC-F, IF, ICC, E

Primary Accession
Reactivity
Rat, Bovine
Host
Rabbit
Clonality
Polyclonal
Calculated MW
Physical State
Liquid

Immunogen KLH conjugated synthetic peptide derived from human KDEL Receptor

Epitope Specificity 151-212/212

Isotype IgG

Purity affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Cytoplasmic vesicle, COPI-coated vesicle membrane; Multi-pass membrane

protein. Endoplasmic reticulum membrane; Multi-pass membrane protein. Endoplasmic reticulum-Golgi intermediate compartment membrane.

SIMILARITY Belongs to the ERD2 family.

SUBUNIT Upon ligand binding the receptor oligomerizes and interacts with components

of the transport machinery such as ARFGAP1 and ARF1.

Post-translational Phosphorylation by PKA at Ser-209 is required for endoplasmic reticulum

modifications retention function.

Important Note This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

Background Descriptions 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.

Additional Information

Gene ID 10945

Other Names ER lumen protein-retaining receptor 1, KDEL endoplasmic reticulum protein

retention receptor 1, KDEL receptor 1, Putative MAPK-activating protein PM23,

KDELR1, ERD2.1

Dilution WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-50

0,ELISA=1:5000-10000

Format 0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

Storage Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

Protein Information

Name KDELR1

Synonyms ERD2.1

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 Golgi apparatus membrane; Multi-pass membrane protein

{ECO:0000250|UniProtKB:P33946}. Cytoplasmic vesicle, COPI-coated vesicle membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:P33946}.

Endoplasmic reticulum membrane; Multi-pass membrane protein

{ECO:0000250|UniProtKB:P33946}. Endoplasmic reticulum-Golgi intermediate compartment membrane {ECO:0000250|UniProtKB:P33946}; Multi-pass membrane protein {ECO:0000250|UniProtKB:P33946} 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

 $Please\ note: All\ products\ are\ 'FOR\ RESEARCH\ USE\ ONLY.\ NOT\ FOR\ USE\ IN\ DIAGNOSTIC\ OR\ THERAPEUTIC\ PROCEDURES'.$