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KDELR1/2/3 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19130b

Product Information

Application	WB, E
Primary Accession	P24390, O43731, P33947
Other Accession	O42580, Q8R1L4, O43731, Q7ZXS5, Q5U305, Q9CQM2, P33947, Q6PEH1, Q5ZKX9, Q2KJ37, Q569A6, Q99JH8, P33946, Q68ES4, Q6PAB8, NP_006792.1
Reactivity	Human, Rat, Mouse
Predicted	Mouse, Rat, Zebrafish, Chicken, Xenopus, Bovine, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB30533
Calculated MW	24542
Antigen Region	185-211

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, ERD21
Target/Specificity	This KDELR1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 185-211 amino acids from the C-terminal region of human KDELR1.
Dilution	WB~~1:2000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	KDELR1/2/3 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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

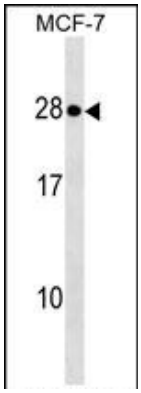
Background

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 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.

References

Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007) :
Breuza, L., et al. J. Biol. Chem. 279(45):47242-47253(2004)
Bard, F., et al. J. Biol. Chem. 278(47):46601-46606(2003)
Yamamoto, K., et al. J. Biol. Chem. 278(36):34525-34532(2003)
Matsuda, A., et al. Oncogene 22(21):3307-3318(2003)

Images



KDELR1 Antibody (C-term) (Cat. #AP19130b) western blot analysis in MCF-7 cell line lysates (35ug/lane).This demonstrates the KDELR1 antibody detected the KDELR1 protein (arrow).

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