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KDELR2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP14724b

Specification

KDELR2 Antibody (C-term) - Product Information

Application	**IHC-P, WB,E**
Primary Accession	P33947
Other Accession	Q5U305, Q9CQM2, Q2KJ37, Q569A6, Q99JH8, P24390, P33946, Q68ES4, NP_006845.1, NP_001094073.1
Reactivity	**Human**
Predicted	**Xenopus, Bovine, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**24422**
Antigen Region	**183-211**

KDELR2 Antibody (C-term) - 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

Target/Specificity
This KDELR2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 183-211 amino acids from the C-terminal region of human KDELR2.

Dilution
IHC-P~~1:10~50
WB~~1:1000
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
KDELR2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

KDELR2 Antibody (C-term) - Protein Information

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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).

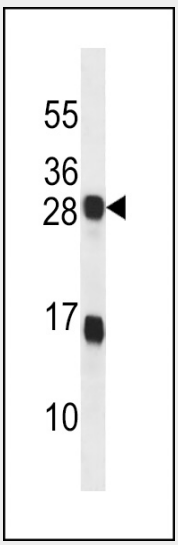
Cellular Location
Endoplasmic reticulum membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q5ZKX9}. Golgi apparatus membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q5ZKX9}. Cytoplasmic vesicle, COPI-coated vesicle membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q5ZKX9} 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

KDELR2 Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KDELR2 Antibody (C-term) - Images



KDELR2 Antibody (C-term) (Cat. #AP14724b) western blot analysis in T47D cell line lysates (35ug/lane).This demonstrates the KDELR2 antibody detected the KDELR2 protein (arrow).

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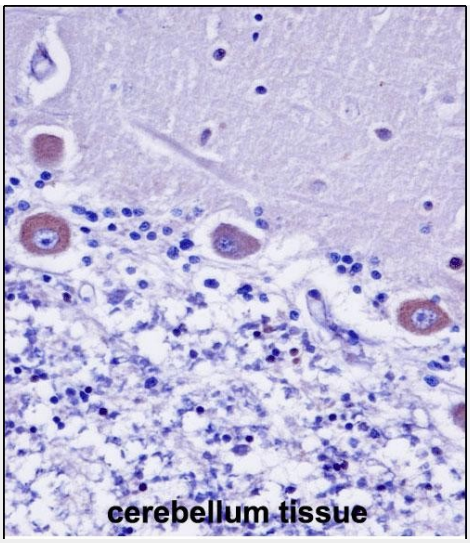

KDELR2 Antibody (C-term) (AP14724b)immunohistochemistry analysis in formalin fixed and paraffin embedded human cerebellum tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of KDELR2 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

KDELR2 Antibody (C-term) - 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, is a seven-transmembrane protein. Unlike yeast, several human homologs of the ERD2 gene, constituting the KDEL receptor gene family, have been described. KDELR2 was the second member of the family to be identified, and it encodes a protein which is 83% identical to the KDELR1 gene product. Alternative splicing results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq].

KDELR2 Antibody (C-term) - 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)