10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ERD22 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP50667

Product Information

Application	WB, IF
Primary Accession	P33947
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	polyclonal
Calculated MW	24422

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
Dilution	WB~~1:1000 IF~~1:100
Format	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.
Storage Conditions	-20℃

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

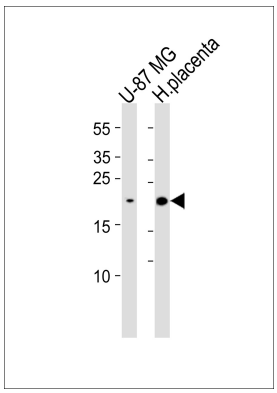
Background

Required for the retention of luminal endoplasmic reticulum proteins. Determines the specificity of the luminal ER protein retention system. Also required for normal vesicular traffic through the Golgi. This receptor recognizes K-D-E-L.

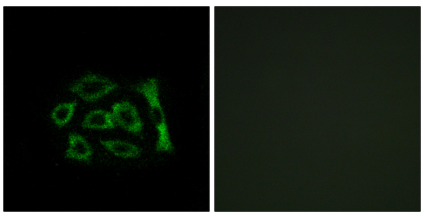
References

Lewis M.J.,et al.J. Mol. Biol. 226:913-916(1992).
Hsu V.W.,et al.Cell 69:625-635(1992).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Hillier L.W.,et al.Nature 424:157-164(2003).
Scherer S.W.,et al.Science 300:767-772(2003).

Images



Western blot analysis of lysates from U-87 MG cell line and human placenta tissue lysate(from left to right),using ERD22 Antibody(AP50667). AP50667 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody.Lysates at 35ug per lane.



Immunofluorescence analysis of A549 cells, using ERD22 antibody.