

Anti-KDEL Receptor Monoclonal Antibody

Catalog Number: M07617-2

About KDEL1

The endoplasmic reticulum is part of a protein sorting pathway, or in essence, the transportation system of the eukaryotic cell. The majority of endoplasmic reticulum resident proteins are retained in the endoplasmic reticulum through a retention motif. This motif is composed of four amino acids at the C-terminal end of the protein sequence. The most common retention sequence is KDEL (lys-asn-glu-leu). However, variation on KDEL does occur and other sequences can also give rise to endoplasmic reticulum retention (6). There are three KDEL receptors in mammalian cells, all have a very high degree of sequence identity; and all are located within the cis-Golgi and its intermediate compartments (4). In terms of function, KDEL receptors interact with GAP (GTPase-activating protein) of ARF1, which is involved in COPI dependent vesicle transport, and the KDEL receptor may also be responsible for the recruitment of this ARF1 to membranes which can then aid in the regulation of vesicle budding (3). It is also important to note that the KDEL receptor exhibits extensive sequence identity to yeast protein Erd2p, which is a receptor for the yeast ER retention signal (4, 5).

Overview

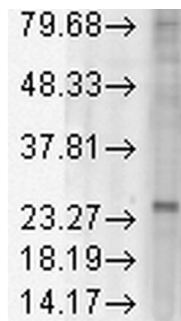
Product Name	Anti-KDEL Receptor Monoclonal Antibody
Reactive Species	Bovine, Chicken, Dog, Drosophila, Hamster, Human, Monkey, Mouse, Pig, Rabbit, Rat, Sheep, Xenopus
Description	Boster Bio Anti-KDEL Receptor Monoclonal Antibody catalog # M07617-2. Tested in IP, IF, IHC, ICC, WB applications. This antibody reacts with Bovine, Chicken, Dog, Fruit fly, Hamster, Human, Monkey, Mouse, Pig, Rabbit, Rat, Sheep, Frog.
Application	IP, IF, IHC, ICC, WB
Clonality	Monoclonal KR-10
Formulation	PBS pH7.2, 50% glycerol, 0.09% sodium azide
Storage Instructions	Store at -20°C for one year. Avoid repeated freeze-thaw cycles.
Host	Mouse
Uniprot ID	P33946

Technical Details

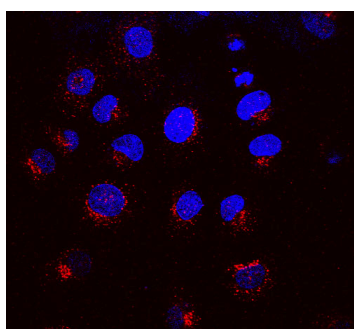
Immunogen	A 21 residue synthetic peptide (amino acids 192-212) based on the bovine KDEL receptor and the peptide coupled to KLH
Predicted Reactive Species	Chimpanzee, Hamster
Cross Reactivity	Detects ~25kDa.
Isotype	IgG1

Form	liquid
Concentration	1 mg/ml
Purification	Protein G Purified
Suggested Dilutions	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>WB (1:1000), ICC/IF (1:1000); optimal dilutions for assays should be determined by the user.</p>

Anti-KDEL Receptor Monoclonal Antibody (M07617-2) Images



Western blot analysis of Rat tissue lysate showing detection of KDEL Receptor protein using Mouse AntiKDEL Receptor Monoclonal Antibody, Clone KR-10 (M07617-2). Load: 15 µg protein. Block: 1.5% BSA for 30 minutes at RT. Primary Antibody: Mouse Anti-KDEL Receptor Monoclonal Antibody (M07617-2) at 1:1000 for 2 hours at RT. Secondary Antibody: Sheep Anti-Mouse IgG: HRP for 1 hour at RT.



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-KDEL Receptor Monoclonal Antibody, Clone KR-10 (M07617-2). Tissue: NRK cells. Species: Rat. Primary Antibody: Mouse Anti-KDEL Receptor Monoclonal Antibody (M07617-2) at 1:1000. Secondary Antibody: APC Goat Anti-Mouse (red). Counterstain: DAPI (blue) nuclear stain. KR-10 staining red; DAPI staining blue. Merged images. Courtesy of: Institute of Mol. and Cell Bio, Singapore.

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