Datasheet for ABIN6655048

anti-KDELR1 antibody

2 Images

Go to Product page

Overview

Quantity:	100 µg
Target:	KDELR1
Reactivity:	Cow
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This KDELR1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunohistochemistry (IHC), Immunoprecipitation (IP)

Product Details

Purpose:	KDEL Receptor Antibody
Immunogen:	KDEL Receptor Antibody was produced in mice by repeated immunizations raised against a 21 residue synthetic peptide based on the bovine KDEL receptor and the synthetic peptide coupled to KLH.
Clone:	KR-10
Isotype:	IgG1
Cross-Reactivity (Details):	A BLAST analysis was used to suggest cross-reactivity with KDEL from Human, Monkey, Rat, Mouse, Hamster, Rabbit, Pig, Bovine, Sheep, Canine, Chicken, Drosophilia, and Xenopus based on 100 % homology with the immunizing sequence.
Purification:	Anti-KDEL Antibody is clarified mouse ascites fluid.
Sterility:	Sterile filtered

Target Details

Target:	KDELR1
Alternative Name:	KDELR1 (KDELR1 Products)
Background:	Synonyms: mouse anti-KDEL Receptor Antibody, ERD2, ERD2.1, ERD21, HDEL, KDEL, KDEL R1, KDELR1, PM23, Lys Asp Glu Leu, K-D-E-L, ER lumen protein retaining receptor 1, KDEL endoplasmic reticulum protein retention, Kdelr1 Background: 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-asp-glu-leu). However, variation on KDEL does occur and other sequences can also give rise to endoplasmic reticulum retention. 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. 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. It is also important to note that the KDEL receptor exhibits extensive sequence identity o yeast protein Erd2p, which is a receptor for the yeast ER retention signal. Gene Name: Kdelr1
Gene ID:	618184
NCBI Accession:	NP_001069963
UniProt:	P33946
Pathways:	Maintenance of Protein Location

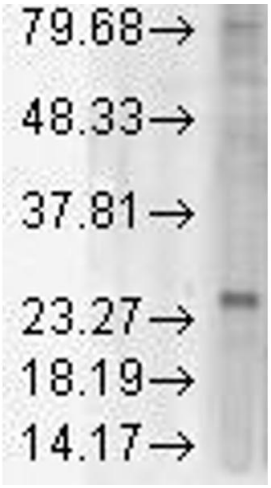
Application Details

Application Notes:	Western_Blot_Dilution: 1:1000 Other: ICC/IF: 1:1000
Comment:	Anti-KDEL Antibody is tested for WB and IF microscopy and suitable for IP and IHC. Expect a band approximately ~25kDa protein corresponding to the molecular mass of KDEL on SDS-PAGE immunoblots. Specific conditions for reactivity should be optimized by the end user.
Restrictions:	For Research Use only

Handling

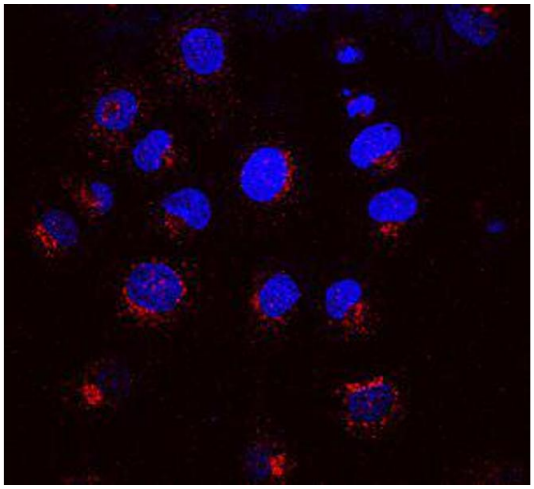
Format:	Liquid
Buffer:	Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 Stabilizer: 50 % (v/v) Glycerol Preservative: 0.09 % (w/v) Sodium Azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiry Date:	12 months

Images



Western Blotting

Image 1. Western Blot of mouse anti-KDEL antibody. Lane 1: Rat Tissue Lysate. Primary antibody: KDEL antibody at 1:1000 for overnight at 4°C. Secondary antibody: Goat anti-mouse IgG HRP secondary antibody at 1:10,000 for 45 min at RT. Block: 5% Blotto overnight 4°C. Predicted/Observed size: 24.5 kDa/25 kDa for KDEL total. Other band(s): none.



Immunofluorescence

Image 2. KDEL Immunofluorescence. Immunofluorescence of mouse anti-KDEL antibody. Tissue: NRK cells. Antigen retrieval: not required. Primary Antibody: KDEL at 1ug/ml for 1h at RT. Secondary antibody: Fluorescein Anti-Mouse secondary at 1:10,000 for 45 min at RT. Localization: Endoplasmic Reticulum cytoplasmic. Staining: KDEL as red fluorescent signal with DAPI blue counterstain.