Mouse KDEL Monoclonal Antibody | anti-Kdelr1 antibody

KDEL Receptor Antibody: ATTO 594

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA103092	**Mouse**	**Human, Monkey, Rat, Mouse, Hamster, Rabbit, Pig, Bovine, Sheep, Canine, Chicken, Drosophilia, Xenopus**	**Immunofluorescence, Immunohistochemistry, Immunocytochemistry, Immunoprecipitation, Western Blot**

PRODUCT SYNONYMS

KDEL; Monoclonal Antibody; KDEL Receptor Antibody: ATTO 594; ERD2; ERD2.1; ERD21; HDEL; KDEL R1; KDELR1; PM23; anti-Kdelr1 antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human, Monkey, Rat, Mouse, Hamster, Rabbit, Pig, Bovine, Sheep, Canine, Chicken, Drosophilia, Xenopus
Clonality	Monoclonal
Isotype	IgG1
Clone Number	KR-10
Form/Format	Protein G Purified
Concentration	1mg/mL (varies by lot)
Sequence Length	212
Applicable Applications for anti-Kdelr1 antibody	IF (Immunofluorescence), IHC (Immunohistochemistry), ICC (Immunocytochemistry), IP (Immunoprecipitation), WB (Western Blot)
Conjugate	ATTO 594
Storage Buffer	PBS pH7.2, 50% glycerol, 0.09% sodium azide
Preparation and Storage	-20 degree C

IMAGES



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



ICC (Immunocytochemistry)
Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-KDEL Receptor Monoclonal Antibody, Clone KR-10. Tissue: NRK cells. Species: Rat. Primary Antibody: Mouse Anti-KDEL Receptor Monoclonal Antibody 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.

ADDITIONAL INFORMATION

Related Product Information for anti-Kdelr1 antibody	**Background Info:** Detects an ~25kDa protein corresponding to the molecular mass of KDEL on SDS-PAGE immunoblots. **Scientific 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 (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 o yeast protein Erd2p, which is a receptor for the yeast ER retention signal (4, 5).
Product Categories/Family for anti-Kdelr1 antibody	Chaperones; Organelle Markers; Trafficking
References	1. Whiteman P., and Handford P.A. (2003) Hum Mol Genet 12(7): 727-737. 2. Forthoffer N., et al. (2002) J Bioenerg Biomemb 34(3): 209-219. 3. Aoe T., et al. (1997) EMBO J. 16: 7305-7316. 4. Tang B.L., Wong S.H, Qi X.L. Low S.H., and Hong W. (1993) J. Cell Biol. 120: 325-328. 5. Lewis M.J. and Pelham H.R. (1990) Nature 348: 162-163. 6. Spurger L. (2002). Endoplasmic reticulum: Structure and function. University of Texas Medical Branch. Retrieved September 13, 2006, from http://cellbio.utmb.edu/cellbio/rer1.htm

NCBI AND UNIPROT INFORMATION

NCBI GI #	19527170
NCBI GeneID	68137
NCBI Accession #	NP_598711.1
NCBI GenBank Nucleotide #	NM_133950.2
UniProt Accession #	Q99JH8
Molecular Weight	24,560 Da
NCBI Official Full Name	ER lumen protein-retaining receptor 1
NCBI Official Synonym Full Names	KDEL (Lys-Asp-Glu-Leu) endoplasmic reticulum protein retention receptor 1
NCBI Official Symbol	Kdelr1
NCBI Official Synonym Symbols	Erd2.1; AW215843; 8030486F04Rik
NCBI Protein Information	ER lumen protein-retaining receptor 1; KDEL receptor 1; ER lumen protein retaining receptor 1; KDEL endoplasmic reticulum protein retention receptor 1
UniProt Protein Name	ER lumen protein-retaining receptor 1
UniProt Gene Name	**Kdelr1**
UniProt Synonym Gene Names	KDEL receptor 1
UniProt Entry Name	ERD21_MOUSE

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: https://stage.aaabiotech.com/monoclonal/kdel-antibody-clone-kr-10-immunofluorescence-immunohistochemistry-immunocytochemistry-immunoprecipitation-western-blot-elisa/103092