

# KDEL Antibody

Catalog # ASM10368

#### Specification

## **KDEL Antibody - Product Information**

Application Host Reactivity Clonality **Description** Rabbit Anti-KDEL Polyclonal ICC/IF, WB Rabbit Human, Mouse, Rat Polyclonal

**Target/Specificity** Detects KDEL proteins, GRP94, Grp78, PDI and calreticulin. It may also see ERp57 and ERp29.

**Other Names** Lys Asp Glu Leu Antibody

Immunogen KDEL containing peptide immunogen

**Purification** Protein A Purified

Storage Storage Buffer PBS pH7.2, 50% glycerol, 0.09% sodium azide -20ºC

Blue Ice or 4ºC

**Certificate of Analysis** A 1:1000 dilution of SPC-109 was sufficient for detection of KDEL-containing proteins in 20 µg of HeLa cell lysate by ECL immunoblot analysis using goat anti-mouse IgG as the secondary.

Cellular Localization Endoplasmic Reticulum

Shipping Temperature

### **KDEL Antibody - Protocols**

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

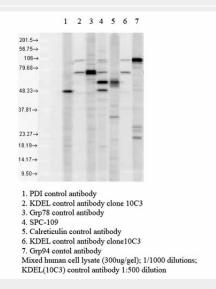
- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

# **KDEL Antibody - Images**

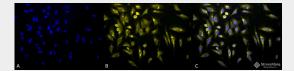




Immunocytochemistry/Immunofluorescence analysis using Rabbit Anti-KDEL Polyclonal Antibody (ASM10368). Tissue: Heat Shocked HeLa Cells. Species: Human. Fixation: 2% Formaldehyde for 20 min at RT. Primary Antibody: Rabbit Anti-KDEL Polyclonal Antibody (ASM10368) at 1:100 for 12 hours at 4°C. Secondary Antibody: FITC Goat Anti-Rabbit (green) at 1:200 for 2 hours at RT. Counterstain: DAPI (blue) nuclear stain at 1:40000 for 2 hours at RT. Localization: Endoplasmic reticulum. Magnification: 100x. (A) DAPI (blue) nuclear stain. (B) Anti-KDEL Antibody. (C) Composite. Heat Shocked at 42°C for 30 min.



Western blot analysis of Human Cell line lysates showing detection of KDEL protein using Rabbit Anti-KDEL Polyclonal Antibody (ASM10368). Primary Antibody: Rabbit Anti-KDEL Polyclonal Antibody (ASM10368) at 1:1000, 1:500.



Immunocytochemistry/Immunofluorescence analysis using Rabbit Anti-KDEL Polyclonal Antibody (ASM10368). Tissue: Heat Shocked HeLa Cells. Species: Human. Fixation: 2% Formaldehyde for 20 min at RT. Primary Antibody: Rabbit Anti-KDEL Polyclonal Antibody (ASM10368) at 1:100 for 12 hours at 4°C. Secondary Antibody: R-PE Goat Anti-Rabbit (yellow) at 1:200 for 2 hours at RT. Counterstain: DAPI (blue) nuclear stain at 1:40000 for 2 hours at RT. Localization: Endoplasmic reticulum. Magnification: 20x. (A) DAPI (blue) nuclear stain. (B) Anti-KDEL Antibody. (C) Composite. Heat Shocked at 42°C for 30 min.

### KDEL Antibody - 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). Grp78 and Grp94 and PDI all share the C-terminal KDEL sequence. The presence of carboxy-terminal KDEL appears to be necessary for ER retention and appears to be sufficient to



reduce the secretion of proteins from the ER.

#### **KDEL Antibody - References**

- 1. Ozawa K., et al. (2008) Mol Pharmacol. 74:1610.
- 2. Austin R.C., et al. (2003) J Biol Chem. 278: 17438.