

#### **KDEL Antibody**

Catalog # ASM10368

## **Specification**

## **KDEL Antibody - Product Information**

Application WB Host Rabbit

Reactivity Human, Mouse, Rat

Clonality Polyclonal

**Description** 

Rabbit Anti-KDEL 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 -20°C

**Storage Buffer** 

PBS pH7.2, 50% glycerol, 0.09% sodium azide

Shipping Temperature

Blue Ice or 4ºC

**Certificate of Analysis** 

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

**Cellular Localization** Endoplasmic Reticulum

### **KDEL Antibody - Protocols**

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

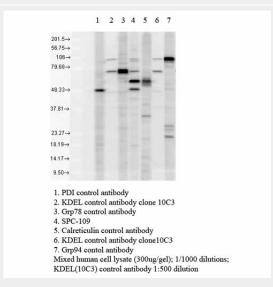
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

### **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





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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.