

### **KDEL Antibody**

Catalog # ASM10368

## **Specification**

## **KDEL Antibody - Product Information**

Application ICC/IF, WB Host Rabbit

Reactivity Human, Mouse,

Rat

Clonality **Polyclonal** 

**Format HRP** 

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 -20ºC

**Storage Buffer** 

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

azide

Shipping Blue Ice or 4ºC

Temperature

**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

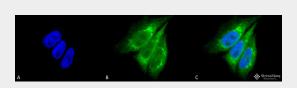
IgG as the secondary.

**Cellular Localization** 

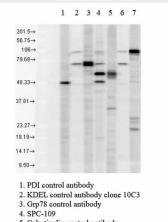
Endoplasmic Reticulum

# **KDEL Antibody - Protocols**

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



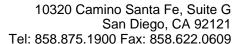
Immunocytochemistry/Immunofluorescence analysis using Rabbit Anti-KDEL Polyclonal Antibody (ASM10368). Tissue: Heat Shocked HeLa Cells. Species: Human. Fixation: 2% Formaldehyde for 20 min at RT. Primary Antibody: Rabbit Anti-KDEL Polyclonal Antibody (ASM10368) at 1:100 for 12 hours at 4°C. Secondary 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.



- 5. Calreticulin control antibody
- KDEL control antibody clone10C3
- 7. Grp94 contol antibody

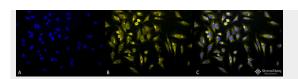
Mixed human cell lysate (300ug/gel); 1/1000 dilutions; KDEL(10C3) control antibody 1:500 dilution

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.





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



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.