

Anti-KDEL

Catalog# SPC-109 A/B

Size: 50/200µg

PO Box 55036, Cadboro Bay
3825 Cadboro Bay Road,
Victoria, BC, V8N 4G0, Canada

This product is for *in vitro* research use only and is not intended for use in humans or animals

StressMarq

Biosciences Inc.

Orders ● sales@stressmarq.com
Tel: ● +1 250 294 9065
Fax: ● +1 250 294 9025
Email ● info@stressmarq.com
Web ● www.stressmarq.com

Product	Rabbit anti-KDEL antibody; polyclonal
Clone	N/A
Immunogen	KDEL containing peptide immunogen
Host and Subclass	Rabbit polyclonal
Cited Applications	WB, IHC
Specificity	Recognizes KDEL proteins, Grp94, Grp78, PDI and Calreticulin. It may also see ERp57 and ERp29.
Species cross-reactivity	Human, Mouse, Rat.
Format	Affinity Purified In PBS pH 7.2, in 50% glycerol with 0.09% azide
Concentration and working dilution	1mg/mL; 1:1000 dilution was sufficient for detection by colorimetric analysis
Storage and stability	-20°C; 1 year+; shipped on cold packs or ambient

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*). 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.

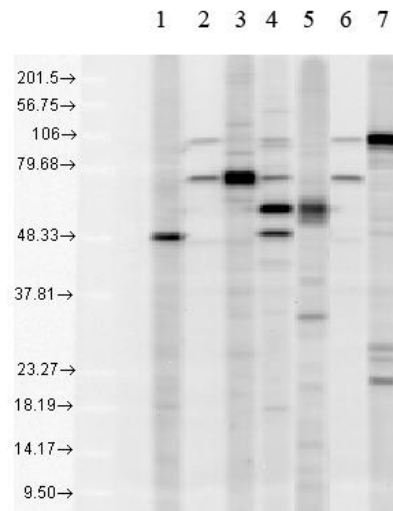
Selected References

1. Ozawa K., *et al.* (2008) *Mol Pharmacol.* 74:1610.

2. Austin R.C., *et al.* (2003) *J Biol Chem.* 278: 17438.

Certificate of Analysis

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



1. PDI control antibody
2. KDEL control antibody clone 10C3
3. Grp78 control antibody
4. SPC-109
5. Calreticulin control antibody
6. KDEL control antibody clone 10C3
7. Grp94 control antibody
Mixed human cell lysate (300µg/gel); 1/1000 dilutions;
KDEL(10C3) control antibody 1:500 dilution

Material Safety Data Sheet

Anti-KDEL (Polyclonal Antibody) SPC-109

This product is for *in vitro* research use only and is not intended for use in humans or animals

The below information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. StressMarq shall not be held liable for any damage resulting from handling or from contact with the above product. See the Technical Specification, Packing Slip, Invoice, and Product Catalogue for additional terms and conditions of sale.

Hazardous Ingredients

The physical, chemical and toxicological properties of these components have not been fully investigated. It is recommended that all laboratory personnel follow standard laboratory safety procedures when handling this product. Safety procedures should include wearing OSHA approved safety glasses, gloves and protective clothing. Direct physical contact with this product should be avoided.

<u>Known Hazardous Components</u>	<u>CAS Number</u>	<u>Percent</u>
Sodium Azide	26628-22-8	0.09

Physical Data

This product consists of rabbit immunoglobulin in PBS containing 0.09% azide in 50% glycerol shipped on gel packs. The physical properties of this product have not been investigated thoroughly.

Fire and Explosion Hazard and Reactivity Data

NOT APPLICABLE

Toxicological Properties

May be harmful by inhalation, ingestion, or skin absorption. The toxicological properties of this product have not been investigated thoroughly. Exercise due caution.

Preventative Measures

Wear chemical safety goggles and compatible chemical-resistant gloves. Avoid inhalation, contact with eyes, skin or clothing.

Spill and Leak Procedures

Observe all federal, state and local environmental regulations.

- Wear protective equipment.
- Absorb on sand or vermiculite and place in closed containers for disposal.
- Dispose or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

First Aid Measures

- If swallowed, wash out mouth with water, provided person is conscious. Call a physician.
- In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. If a rash or other irritation develops, call a physician.
- If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.
- In case of eye contact, flush with copious amounts of water for at least 15 minutes while separating the eyelids with fingers. Call a physician.