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HDEL Antibody
HDEL Antibody, Clone 2E7
Catalog # ASM10112

Specification

HDEL Antibody - Product Information

Application	**WB, ICC**
Host	**Mouse**
Isotype	**IgG2b**
Reactivity	**Yeast, Drosophila**
Clonality	**Monoclonal**

Description
Mouse Anti-Yeast HDEL Monoclonal IgG2b

Target/Specificity
Detects ~78kDa.

Other Names
H-D-E-L (his-asp-glu-leu) Antibody, endoplasmic reticulum Antibody, luminal ER protein retention Antibody, KDELR1 Antibody, Endoplasmic reticulum retention signal Antibody

Immunogen
Raised against a synthetic HDEL peptide corresponding to the C-terminus of yeast Bip

Purification
Protein G Purified

Storage	**-20ºC**

Storage Buffer
PBS pH7.4, 50% glycerol, 0.09% sodium azide

Shipping Temperature	**Blue Ice or 4ºC**

Certificate of Analysis
1 µg/ml of SMC-175 was sufficient for detection of HDEL-containing proteins in 10 µg of S. cerevisiae lysate by colorimetric immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

Cellular Localization
Endoplasmic Reticulum

HDEL 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

HDEL Antibody - Images

HDEL Antibody - Background

HSP 70 family comprises four highly conserved proteins, HSP 70, HSC 70, GRP 75 and GRP 78, which serve a variety of roles. They act as molecular chaperones, facilitating the assembly of multi-protein complexes; participate in the translocation of polypeptides across cell membranes and to the nucleus; and aid in the proper folding of nascent polypeptide chains (1, 2). GRP 78 is localized in the endoplasmic reticulum (ER), where it receives imported secretory proteins and is involved in the folding and translocation of nascent peptide chains (2). Sorting of these proteins is dependent on a C-terminal tetrapeptide signal, usually KDEL in animal cells, and HDEL in S.cerevisiae (3). The 2E7 clone recognizes the C-terminal peptide HDEL, a common version of the endoplasmic reticulum retention signal found in yeast, plant, nematode and other ER proteins. 2E7 specifically stains HDEL proteins in barnyard grass, beet, cotton, mung bean, sorghum and wheat (4).

HDEL Antibody - References

1. Mayer M.P., and Bukau B. (2005) Cell Mol Life Sci. 62(6): 670-684.
2. Luo S., Mao C., Lee B., and Lee A.S. (2006) Mol Cell Biol. 26(15): 5688-5697.
3. Entrez Gene: HDEL, Gene ID: 10945
4. Napier R.M., et al. (1992) J Cell Sci. 102: 261-271.