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Datasheet for ABIN2782741

## anti-KDEL3 antibody (Middle Region)

1 Image

1 Publication

### Overview

Quantity:	100 µL
Target:	KDEL3 (kDEL3)
Binding Specificity:	Middle Region
Reactivity:	Human, Mouse, Rat, Horse, Pig, Rabbit, Cow, Dog, Guinea Pig
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This KDEL3 antibody is un-conjugated
Application:	Western Blotting (WB)

### Product Details

Immunogen:	The immunogen is a synthetic peptide directed towards the middle region of human KDEL3
Sequence:	AYVTVYMIYG KFRKTFDSEN DTFRLEFLLV PVIGLSFLEN YSFTLLEILW
Predicted Reactivity:	Cow: 100%, Dog: 100%, Guinea Pig: 93%, Horse: 100%, Human: 100%, Mouse: 92%, Pig: 100%, Rabbit: 100%, Rat: 93%
Characteristics:	This is a rabbit polyclonal antibody against KDEL3. It was validated on Western Blot using a cell lysate as a positive control.
Purification:	Affinity Purified

### Target Details

Target:	KDEL3 (kDEL3)
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## Target Details

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Alternative Name: [KDEL3 \(kDEL3 Products\)](#)

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Background: Retention of resident soluble proteins in the lumen of the endoplasmic reticulum (ER) is achieved in both yeast and animal cells by their continual retrieval from the cis-Golgi, or a pre-Golgi compartment. Sorting of these proteins is dependent on a C-terminal tetrapeptide signal, usually lys-asp-glu-leu (KDEL) in animal cells, and his-asp-glu-leu (HDEL) in *S. cerevisiae*. This process is mediated by a receptor that recognizes, and binds the tetrapeptide-containing protein, and returns it to the ER. In yeast, the sorting receptor encoded by a single gene, ERD2, is a seven-transmembrane protein. Unlike yeast, several human homologs of the ERD2 gene, constituting the KDEL receptor gene family, have been described. KDELR3 was the third member of the family to be identified, and it encodes a protein highly homologous to KDELR1 and KDELR2 proteins. Retention of resident soluble proteins in the lumen of the endoplasmic reticulum (ER) is achieved in both yeast and animal cells by their continual retrieval from the cis-Golgi, or a pre-Golgi compartment. Sorting of these proteins is dependent on a C-terminal tetrapeptide signal, usually lys-asp-glu-leu (KDEL) in animal cells, and his-asp-glu-leu (HDEL) in *S. cerevisiae*. This process is mediated by a receptor that recognizes, and binds the tetrapeptide-containing protein, and returns it to the ER. In yeast, the sorting receptor encoded by a single gene, ERD2, is a seven-transmembrane protein. Unlike yeast, several human homologs of the ERD2 gene, constituting the KDEL receptor gene family, have been described. KDELR3 was the third member of the family to be identified, and it encodes a protein highly homologous to KDELR1 and KDELR2 proteins. Two transcript variants of KDELR3 that arise by alternative splicing, and encode different isoforms of KDELR3 receptor, have been described.

Alias Symbols: ERD2L3

Protein Interaction Partner: UBC,

Protein Size: 214

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Molecular Weight: 25 kDa

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Gene ID: 11015

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NCBI Accession: [NM\\_006855](#), [NP\\_006846](#)

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UniProt: [O43731](#)

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Pathways: [ER-Nucleus Signaling](#), [Maintenance of Protein Location](#)

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## Application Details

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Application Notes: Optimal working dilutions should be determined experimentally by the investigator.

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Comment: Antigen size: 214 AA

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## Application Details

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Restrictions: For Research Use only

## Handling

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Format: Liquid

Concentration: Lot specific

Buffer: Liquid. Purified antibody supplied in 1x PBS buffer with 0.09 % (w/v) sodium azide and 2 % sucrose.

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Handling Advice: Avoid repeated freeze-thaw cycles.

Storage: -20 °C

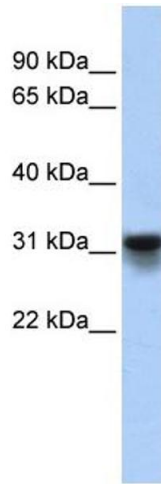
Storage Comment: For short term use, store at 2-8°C up to 1 week. For long term storage, store at -20°C in small aliquots to prevent freeze-thaw cycles.

## Publications

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Product cited in: Rayegan, Dehpour, Sharifi: "Studying neuroprotective effect of Atorvastatin as a small molecule drug on high glucose-induced neurotoxicity in undifferentiated PC12 cells: role of NADPH oxidase." in: **Metabolic brain disease**, Vol. 32, Issue 1, pp. 41-49, (2016) ([PubMed](#)).

Kuwano, Kawahara, Yamamoto, Teshima-Kondo, Tominaga, Masuda, Kishi, Morita, Rokutan: "Interferon-gamma activates transcription of NADPH oxidase 1 gene and upregulates production of superoxide anion by human large intestinal epithelial cells." in: **American journal of physiology. Cell physiology**, Vol. 290, Issue 2, pp. C433-43, (2006) ([PubMed](#)).



### Western Blotting

**Image 1.** WB Suggested Anti-KDEL3 Antibody Titration:  
0.2-1 ug/ml ELISA Titer: 1:312500 Positive Control: Human heart