

# KDEL monoclonal antibody (10C3)

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Citations: 222

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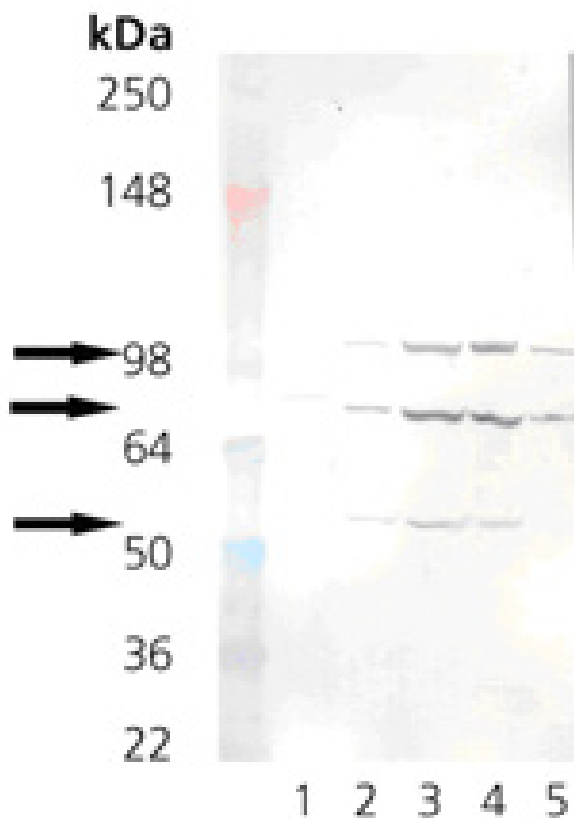
## Ordering Information

[Order Online »](#)

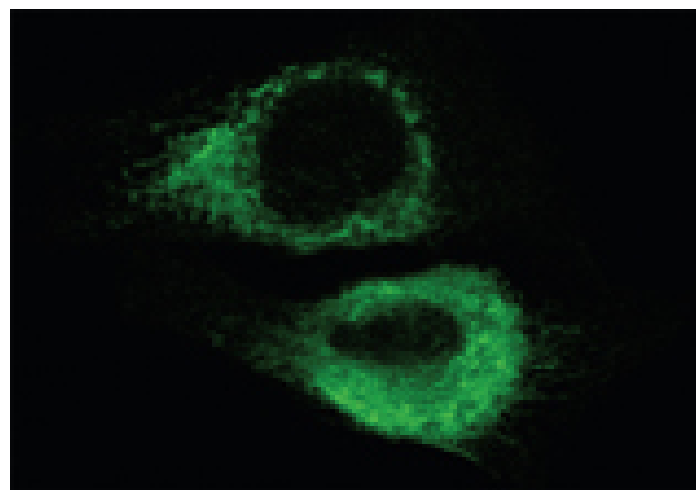
ADI-SPA-827-J	1mg
ADI-SPA-827-D	50µg
ADI-SPA-827-F	200µg

## Manuals, SDS & CofA

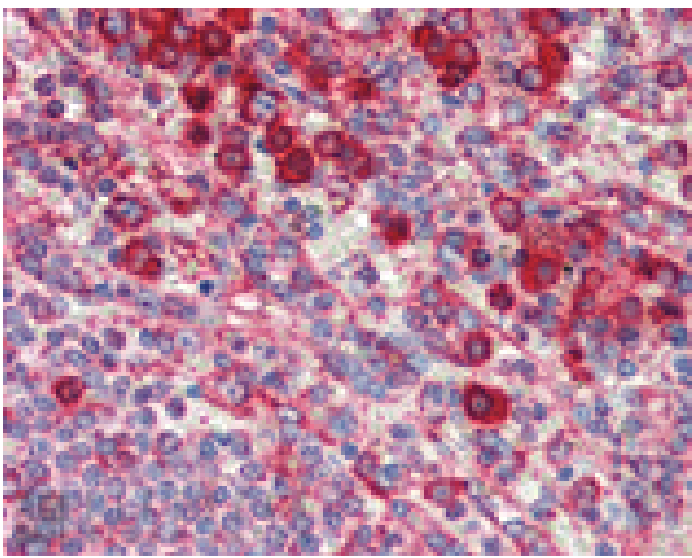
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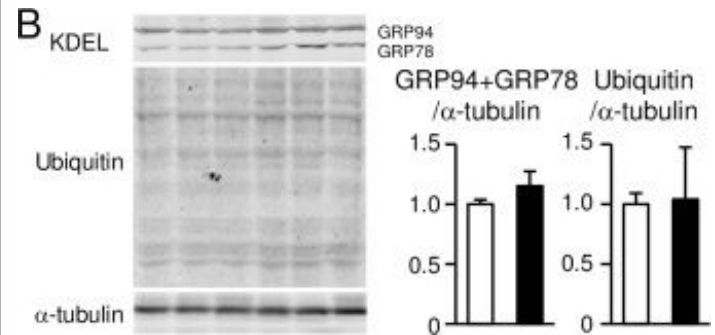
Western blot analysis: Lane 1: Grp78 (BiP) recombinant protein (Prod No. ADI-SPP-765), Lane 2: RK-13, Lane 3: Mouse liver microsomes, Lane 4: Rat liver microsomes, Lane 5: HeLa Cell Lysate (heat shocked) (Prod No. ADI-LYC-HL101).



Immunofluorescence analysis of endoplasmic reticulum staining of mouse C2C12 myoblasts transfected with wild type mouse ADAM12 using KDEL (Grp78, Grp94) mAb (10C3).

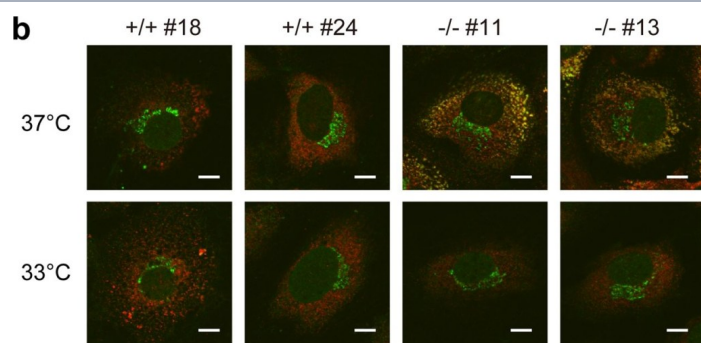


Immunohistochemistry analysis of human spleen tissue stained with KDEL, mAb (10C3) at 10µg/ml.



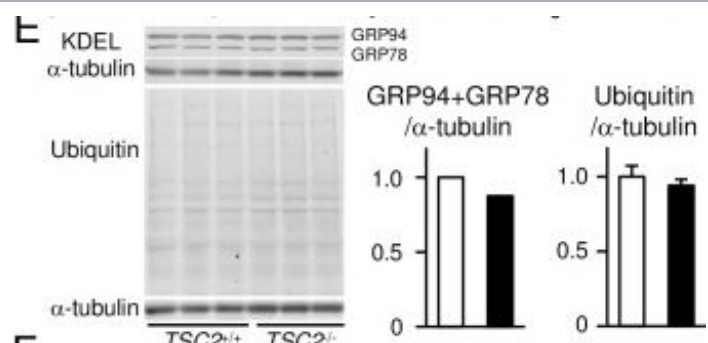
Upregulation of the mTORC1 signaling pathway in TSC2<sup>-/-</sup> hearts. The data at 4 months of age in (A) to (C). The data at 4 weeks of age in (D) to (F). (A) and (D): Western blot analysis of signaling proteins upstream or downstream of mTORC1 in the heart of TSC2<sup>+/+</sup> or TSC2<sup>-/-</sup> mice. p-Akt, t-Akt, p-AMPK, t-AMPK, p-S6 and t-S6 indicate phosphorylated Akt, total Akt, phosphorylated AMPK, total AMPK, phosphorylated S6 and total S6, respectively. Data of phosphorylated proteins were normalized to corresponding total protein content, TSC1 and t-AMPK to alpha-tubulin and gamma-form to total 4E-BP1 (t-4E-BP1), respectively. (B) and (E): Western blot analyses of KDEL and ubiquitinated proteins. (C) and (F): Western blot analyses of LC3 and p62. Data were normalized to the alpha-tubulin protein. All data are expressed as fold increase over levels in the TSC2<sup>+/+</sup> group. Open and closed bars represent TSC2<sup>+/+</sup> and TSC2<sup>-/-</sup> mice, respectively. Values represent the mean  $\pm$  S.E.M. of data from 3–7 mice in each group. \*P < 0.05 versus corresponding control.

Image collected and cropped by CiteAb under a CC-BY license from the following publication: mTOR Hyperactivation by Ablation of Tuberous Sclerosis Complex 2 in the Mouse Heart Induces Cardiac Dysfunction with the Increased Number of Small Mitochondria Mediated through the Down-Regulation of Autophagy. *PLoS One* (2016)



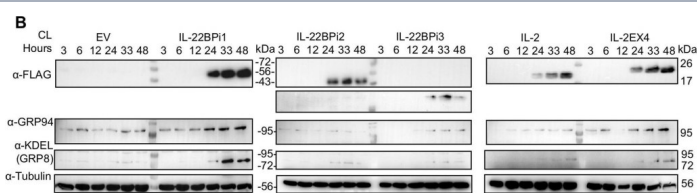
Immunofluorescence staining of extracellular and intracellular type I collagen. (a) Immunofluorescence staining of type I collagen secreted from MEF clones was performed with an anti-type I collagen antibody without cell permeabilization. Scale bars: 100  $\mu$ m. (b,c) Immunofluorescence staining of permeabilized MEF clones was performed with anti-type I collagen (green) and anti-KDEL antibodies (red) (b) or anti-type I collagen (green) and anti-GM130 antibodies (red). (c) Scale bars: 10  $\mu$ m.

Image collected and cropped by CiteAb under a CC-BY license from the following publication: Lowering the culture temperature corrects collagen abnormalities caused by HSP47 gene knockout. *Sci Rep* (2019)



Upregulation of the mTORC1 signaling pathway in TSC2<sup>-/-</sup> hearts. The data at 4 months of age in (A) to (C). The data at 4 weeks of age in (D) to (F). (A) and (D): Western blot analysis of signaling proteins upstream or downstream of mTORC1 in the heart of TSC2<sup>+/+</sup> or TSC2<sup>-/-</sup> mice. p-Akt, t-Akt, p-AMPK, t-AMPK, p-S6 and t-S6 indicate phosphorylated Akt, total Akt, phosphorylated AMPK, total AMPK, phosphorylated S6 and total S6, respectively. Data of phosphorylated proteins were normalized to corresponding total protein content, TSC1 and t-AMPK to  $\alpha$ -tubulin and gamma-form to total 4E-BP1 (t-4E-BP1), respectively. (B) and (E): Western blot analyses of KDEL and ubiquitinated proteins. (C) and (F): Western blot analyses of LC3 and p62. Data were normalized to the  $\alpha$ -tubulin protein. All data are expressed as fold increase over levels in the TSC2<sup>+/+</sup> group. Open and closed bars represent TSC2<sup>+/+</sup> and TSC2<sup>-/-</sup> mice, respectively. Values represent the mean  $\pm$  S.E.M. of data from 3–7 mice in each group. \*P < 0.05 versus corresponding control.

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IL-22BPi1 and IL-2EX4 induce unfolded protein response (UPR) genes. HEK293 cells were transiently transfected with IL-22BPi1, IL-22BPi2, IL-22BPi3, IL-2, IL-2EX4 or empty vector (EV) as control. Cells were collected at the indicated hours after transfection. (A) Expression of different genes related to ER function or UPR were analyzed by RT-qPCR. Each gene expression value is represented as fold change relative to the same time-point expression value of the EV condition and relative to the housekeeping gene GAPDH. Mean  $\pm$  SEM of three independent experiments. All primers are listed in Supplementary Table 2. (B) GRP78 and GRP94 protein levels correlate with mRNA levels observed in (A). Cell lysates (CL) were immunoblotted for FLAG, GRP94, KDEL and tubulin as loading control. (C) IL-22BPi1 and IL-2EX4 cause XBP1 splicing. XBP1 splicing was detected with conventional PCR for the indicated conditions and times. Un-spliced and spliced XBP1 are indicated as XBP1-u or XBP1s respectively. (D) IL-22BPi2 secretion was not increased when co-expressed with different ratios of IL-22BPi1. HEK293 cells were co-expressed with different ratios of EV:IL-22BPi1:IL-22BPi2 expression plasmids. 48 h later, secreted IL-22BP in conditioned media (CM) was quantified by ELISA (mean  $\pm$  SEM; n = 3). (E) Cell viability measured with alamarBlue was not compromised by any of the conditions in two different cell lines. Reduction of alamarBlue was measured after 48 h of transfection and assayed for the indicated times and cell lines. Values are represented as percentage of reduction in each condition relative to EV (mean  $\pm$  SEM; n = 3).

Image collected and cropped by CiteAb under a CC-BY license from the following publication: Long Interleukin-22 Binding Protein Isoform-1 Is an Intracellular Activator of the Unfolded Protein Response. *Front Immunol* (2019)

# Handling & Storage

Handling Avoid freeze/thaw cycles.

Long Term Storage -20°C

Shipping Blue Ice

# Regulatory Status

RUO - Research Use Only

# Product Details

Alternative Name Lys-Asp-Glu-Leu, Lysine-aspartic acid-glutamate-leucine

Application Electron microscopy, ELISA, Flow Cytometry, ICC, IF, IHC (PS), IP, WB

Application Notes Detects three bands of ~94kDa, ~78 kDa and ~55kDa by Western blot..

Clone 10C3

Formulation Liquid. In PBS, pH 7.2, containing 50% glycerol and 0.09% sodium azide.

GenBank ID M14050

Host Mouse

Immunogen Synthetic peptide corresponding to aa 649-654 (S649EKDEL654) of rat Grp78.

Isotype IgG2a

Purity Detail Protein G affinity purified.

Recommendation Dilutions/Conditions Western Blot (1:1,000, colorimetric)Suggested dilutions/conditions may not be available for all applications.Optimal conditions must be determined individually for each application.

Source Purified from ascites.

Species Reactivity Avian, Insect, Mammalian, Plant, Yeast

**Specificity**

Recognizes proteins containing the KDEL sequence.

**Technical Info / Product Notes****Cited samples:**

[For an overview on cited samples please click here.](#)

**UniProt ID**

P06761

**Worry-free Guarantee**

This antibody is covered by our [Worry-Free Guarantee](#)

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**Last modified: May 29, 2024**



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