Calnexin polyclonal antibody

Calnexin (CNX), an unglycosylated resident ER transmembrane protein, together with Calreticulin (CRT), plays a key role in glycoprotein folding and its control within the ER, by interacting with folding intermediates via their monoglucosylated glycans. Calnexin associates with newly synthesized monomeric glycoproteins and only recognizes glycoproteins when they are incompletely folded. Furthermore, Calnexin has been demonstrated to function as a molecular chaperone capable of interacting with polypeptide segments of folding glycoproteins.

This antibody is covered by our Worry-Free Guarantee.

Citations: 126 View Online »

Ordering Information

Order Online »

ADI-SPA-865-D	50µg
ADI-SPA-865-F	200µg

Manuals, SDS & CofA

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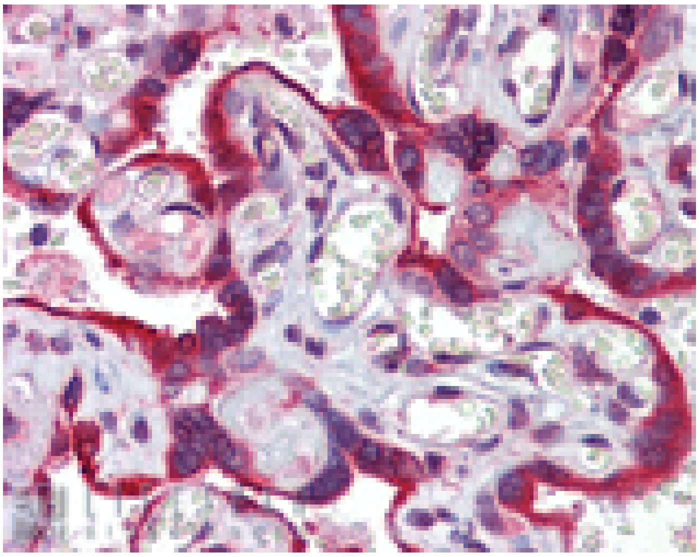
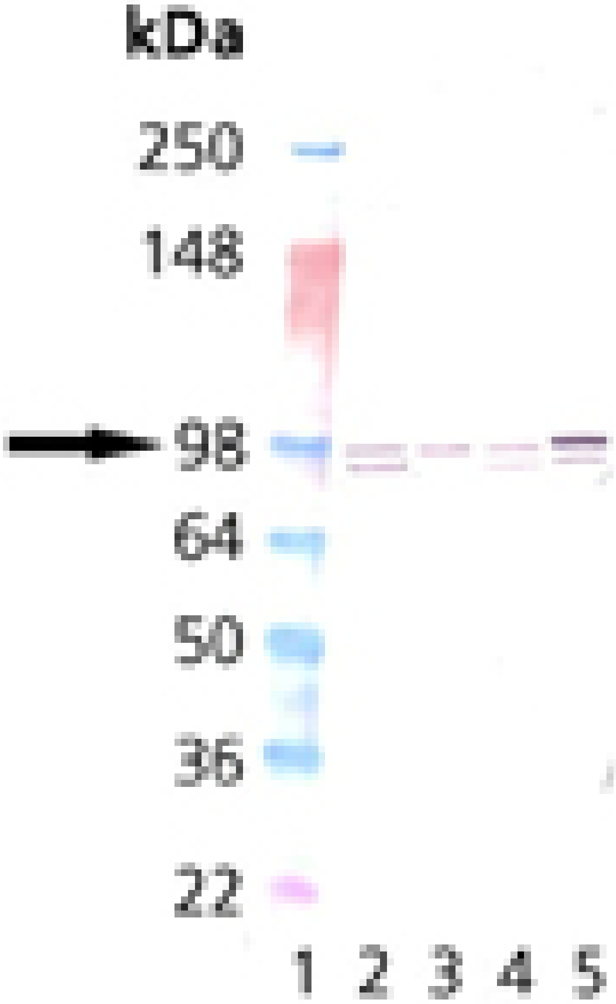
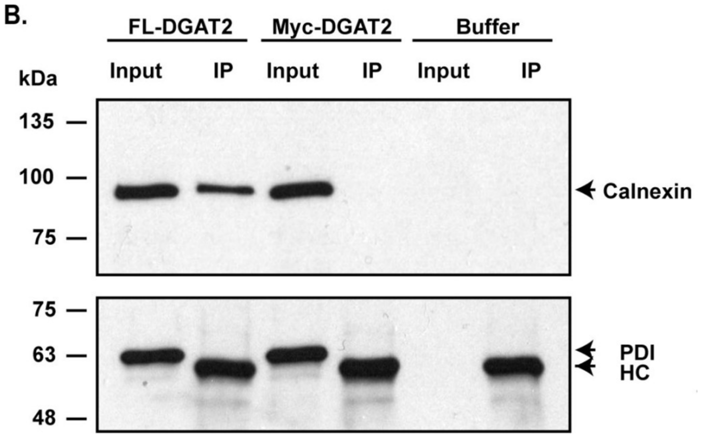
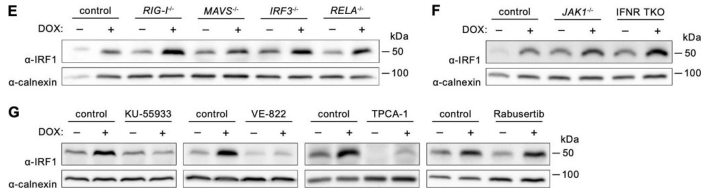
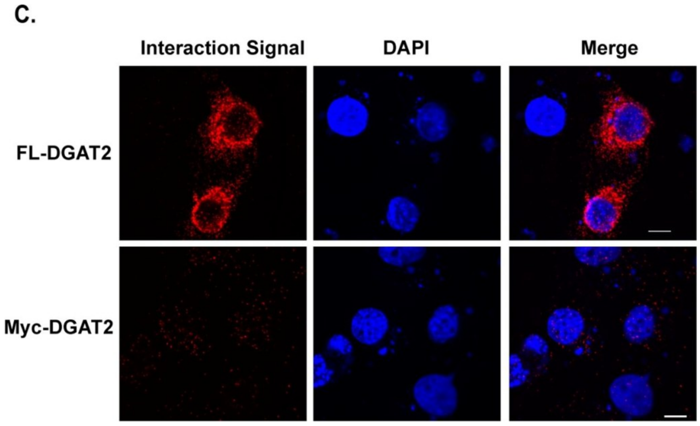
 Immunohistochemistry analysis of human placenta tissue stained with Calnexin, pAb at 5µg/ml.	 Western blot analysis: Lane 1: MWM, Lane 2: Vero, Lane 3: 3T3, Lane 4: PC-12, Lane 5: HeLa.



Identification of calnexin as a DGAT2 interacting protein by co-immunoprecipitation and mass spectrometry.(A) HEK-293T cells were transfected with either FL-DGAT2 or myc-DGAT2. FL-DGAT2 was immunoprecipitated with anti-FLAG agarose from detergent solubilized material. Immunoprecipitates (IP) were separated by SDS-PAGE and were then probed with anti-DGAT2. (B) Calnexin, but not PDI, was detected in anti-FLAG immunoprecipitates by immunoblotting. HC; heavy chain. (C) Interaction of DGAT2 and calnexin was detected in situ using a proximity ligation assay. COS-7 cells expressing either FL-DGAT2 or Myc-DGAT2 were stained with mouse anti-FLAG and rabbit anti-calnexin antibodies. Interaction signals (red) were detected using a Duolink detection kit. Nuclei were stained with DAPI (blue). Scale bar = 10 μm.



Effect of cell-intrinsic antiviral signaling components on dsRNA-induced cell death and IRF1 expression.A A549 cells with functional KO of the indicated genes were mock stimulated with poly(C) or stimulated with 2 ng/ml 5’ppp-dsRNA for 6 h. IRF1 mRNA transcripts were determined by qRT-PCR; fold-induction over mock stimulation is shown. Non-normalized data shown in Fig. S6A + B. B–D Percentage of dead A549 cells with functional KO of the indicated genes relative to total cells counted over time (B, C) or 36 h (D) post dsRNA stimulation. Mock controls (poly[C] stimulation) shown in Fig. S6C + D. E–G A549 cells with functional KO of the indicated genes or administration of the indicated inhibitors were treated with 2 μM DOX or DMSO for 6 h. Levels of IRF1 were determined by western blot. Uncropped images of western blots shown in Fig. S9E–G. Quantification of replicate (n ≥ 3) western blots shown in Fig. S6H + I. A–D Data shown represent the results of at least three biologically independent experiments.



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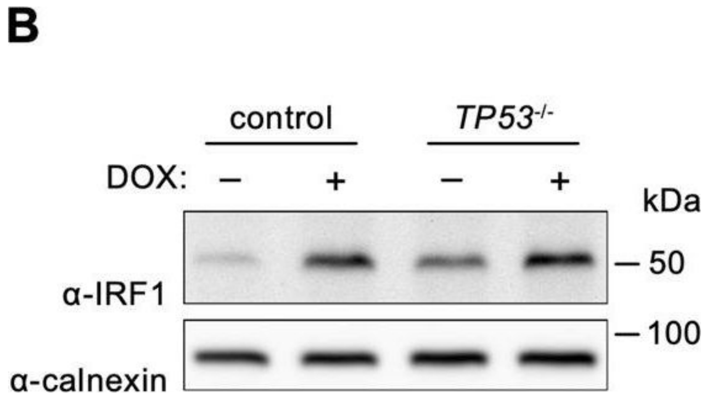
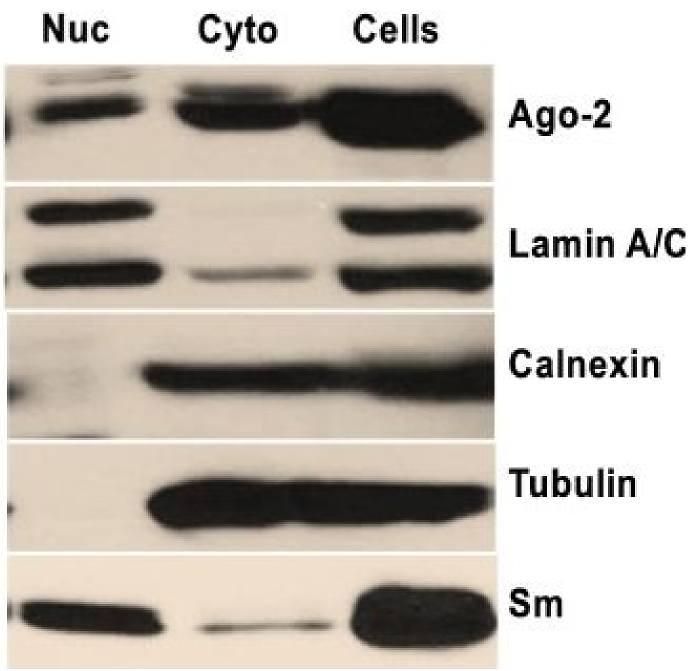


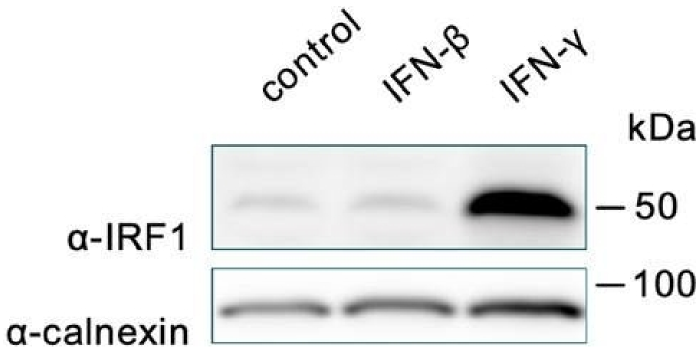
Relevance of IRF1 on DNA damage-induced cell death.A A549 cells were treated with 1 μM DOX or DMSO for the indicated durations. IRF1 mRNA transcripts were determined by qRT-PCR. B A549 cells or A549 TP53−/− were treated with 1 μM DOX or DMSO for 10 h. Levels of IRF1 were determined by western blot. Uncropped image of western blot shown in Fig. S9B. Quantification of replicate western blots in Fig. S4A. C A549 cells were mock treated or stimulated with IFN-β or IFN-γ over-night. Levels of IRF1 were determined by western blot. Uncropped image of western blot shown in Fig. S9C. Data with additional DOX-treatment in Fig. S4B. D–G Percentage of dead A549 cells with functional KO or OE of IRF1, or post IFN pre-stimulation relative to total cells counted over time (D–F) or 36 h (G) post DOX or γ-IR (20 Gy) treatment. DMSO controls shown in Fig. S4D, E, G. H Percentage of dead cells upon IFN-γ treatment in absence or presence of γ-IR (20 Gy) at 36 h. I A549 cells were γ-irradiated. After 10 h IRF1 protein levels were determined by western blot. Uncropped image of western blot shown in Fig. S9D. A, D–H Data shown represent the results of at least three biologically independent experiments.

B



KSHV miRNAs and Ago2 are partially localized in the nuclei of latently infected cells.(A) qRT-PCR analysis of mature KSHV miRNA distribution in the cytoplasmic and nuclear fractions of PEL cells. Percentage distribution was calculated by normalizing to expression in whole PEL cells, assuming no loss during fractionation. RNU48 was used as a nuclear control for fractionation. The bar graphs show the mean values (n = 3) ± SEM. p-values: * < 0.05; ** < 0.01; *** < 0.005. (B) Subcellular distribution of Ago2 proteins in PEL cells analyzed using Western blotting. Tubulin was probed as positive control for cytoplasm, Sm and Lamin A/C are positive controls for nuclei and Calnexin is the negative control for Endoplasmic Reticulum (C) Localization of Ago2 in PEL nuclei analyzed using IFA and confocal microscopy. Ago2 is shown in green and DAPI in blue. DAPI is shown at half the original intensity.

C



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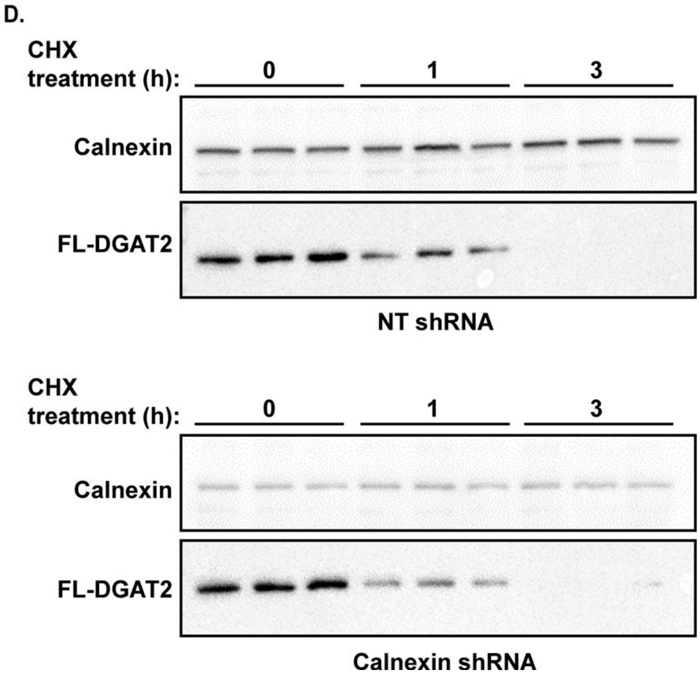

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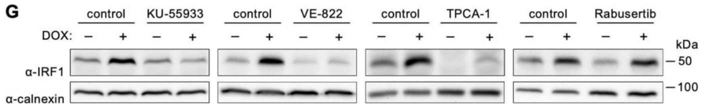

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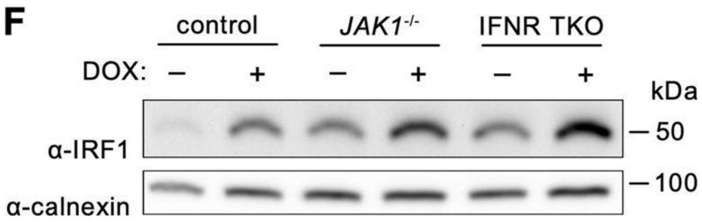

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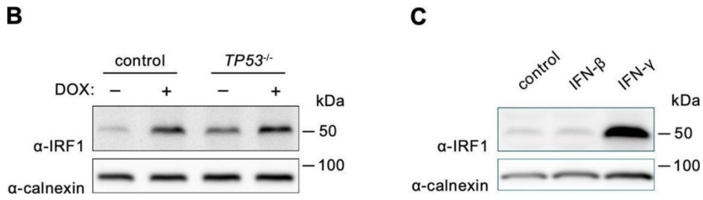

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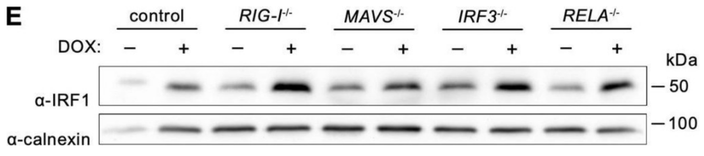

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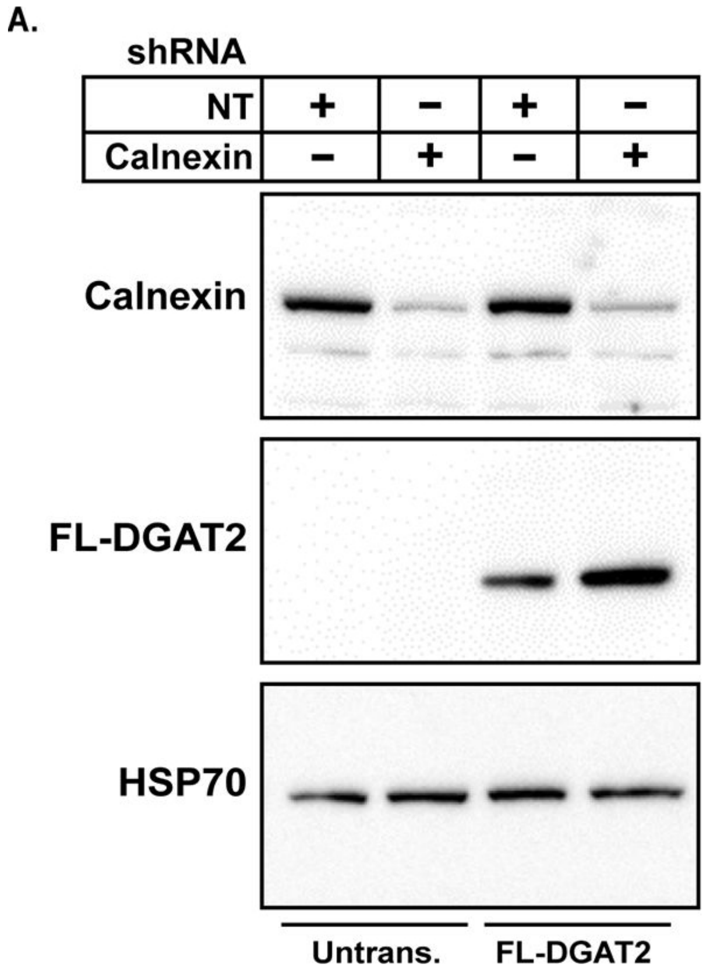

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Handling & Storage

Long Term Storage	-20°C
Shipping	Blue Ice

Regulatory Status RUO - Research Use Only

Product Details

Alternative Name	CNX
Application	ICC, IHC (PS), IP, WB
Application Notes	Detects a band of ~90kDa by Western blot.
Formulation	Liquid. In PBS, pH 7.2, containing 50% glycerol and 0.09% sodium azide.
GenBank ID	X53616
Host	Rabbit
Immunogen	Synthetic peptide corresponding to the sequence near the N-terminus of dog calnexin.
Purity Detail	Protein A 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 rabbit serum.
Species Reactivity	Bovine, C. elegans, Chicken, Dog, Guinea pig, Hamster, Human, Monkey, Mouse, Porcine, Rabbit, Rat, Sheep, Xenopus
UniProt ID	P24643
Worry-free Guarantee	**This antibody is covered by our Worry-Free Guarantee .**

Last modified: May 29, 2024

ENZO LIFE SCIENCES, INC.
Phone: 800.942.0430
info-usa@enzolifesciences.com

European Sales Office
ENZO LIFE SCIENCES (ELS) AG
Phone: +41 61 926 8989
info-eu@enzolifesciences.com

Belgium, The Netherlands & Luxembourg
Phone: +32 3 466 0420
info-be@enzolifesciences.com

France
Phone: +33 472 440 655
info-fr@enzolifesciences.com

Germany
Phone: +49 7621 5500 526
info-de@enzolifesciences.com

UK & Ireland
Phone (UK customers): 0845 601 1488
Phone: +44 1392 825900
info-uk@enzolifesciences.com