

Calnexin Polyclonal Antibody

Product Specifications

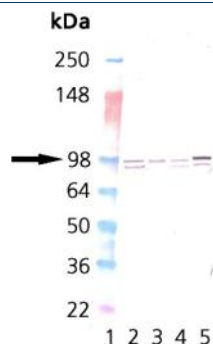
Catalog Number:	SPA-865
Host:	Rabbit
Species Reactivity:	Human, mouse, rat, bovine, canine, chicken, guinea pig, hamster, monkey, pig, rabbit, sheep and <i>Xenopus</i> Other species not tested.
Applications: <i>The optimal dilution for a specific application must be determined by the investigator</i>	WB¹²: 1:1000 (Colorimetric) Other applications not tested.
Predicted m.w.:	~90 kDa
Concentration:	See product label
Purification:	Protein A Affinity
Format:	PBS, pH 7.2, 0.09% azide, 50% glycerol
Storage: <i>Shipping conditions may differ from the recommended storage temperature</i>	Store at -20°C
Immunogen:	Synthetic peptide derived from sequence near the amino-terminus of canine Calnexin, conjugated to KLH
Related Products:	
LYC-HL100	HeLa Cell Lysate
SAB-300	Goat anti-Rabbit IgG Polyclonal Antibody, HRP Conjugate
SPA-860	Calnexin Polyclonal Antibody
NEW! SPP-865	Calnexin Recombinant Protein
SPA-600	Calreticulin Polyclonal Antibody
NEW! SPP-600	Calreticulin Recombinant Protein

Background:

Calnexin (CNX), an abundant ~90 kDa molecular chaperone, is a resident type I transmembrane protein of the endoplasmic reticulum (ER)^{1,2}. A majority of the calnexin protein resides in the luminal portion of the ER, and is the membrane-bound paralog of the soluble ER protein Calreticulin¹. In mammalian cells, calnexin and calreticulin (CRT) are lectins that play key roles in glycoprotein folding within the ER, specifically binding oligosaccharide intermediates that contain a single terminal Glc₁Man₉GlcNAc₂ residue³⁻⁶. Calnexin associates with newly synthesized, incompletely folded monomeric glycoproteins as well as numerous oligomeric protein complexes, including β1 and α6 integrins, major histocompatibility class I and class II molecules, the antigen receptors expressed on T and B lymphocytes, the human thyroperoxidase (hTPO), and acetylcholine receptor⁷⁻¹⁰. Data also indicates that calnexin might be responsible for the prolonged retention of pro-α6 integrin within the ER compartment¹⁰. Furthermore, calnexin may function as a bona fide molecular chaperone capable of interacting with polypeptide segments of folding glycoproteins^{2,11}.

References:

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Western Blot Analysis: Lane 1: MWM,
Lane 2: Vero, Lane 3: 3T3, Lane 4: PC-12,
Lane 5: HeLa

Assay Designs makes every effort to provide a consistent source of high quality polyclonal antibodies. However, due to variations inherent in this technology, investigators are urged to purchase sufficient quantities of a specific lot number if an identical antibody is required throughout a study.

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