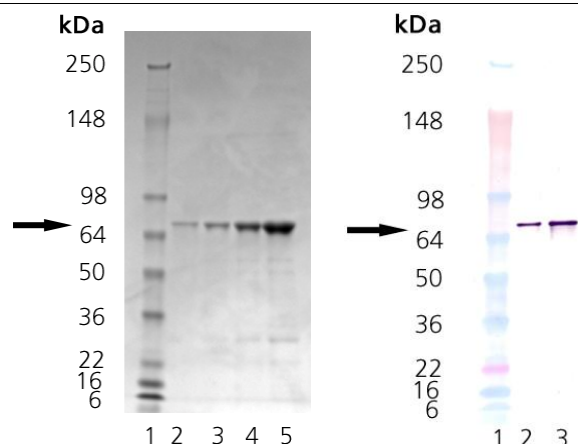


Calnexin Recombinant Human Protein (Luminal Domain)

Product Specifications

Catalog Number:	SPP-865
Product Description:	Human Recombinant Calnexin Protein (Luminal domain)
Format:	Tris, NaCl, 5% glycerol, 5 mM CaCl ₂
Application:	WB Control: 50 ng of protein recommended (Colorimetric)
Purity:	> 85% full-length as determined by SDS-PAGE and Western blot analyses
Molecular Weight:	~ 74 kDa observed (isolated luminal domain)
Concentration:	See product label
Storage:	Store at -70°C <i>Shipping conditions may differ from the recommended storage temperature</i>
Related Products:	
SPA-865	Calnexin Polyclonal Antibody
LYC-HL100	HeLa Cell Lysate
SAB-301	Goat anti-Rabbit IgG polyclonal antibody, AP conjugate
NEW! SPP-600	Calreticulin Recombinant Protein
SPA-600	Calreticulin Polyclonal Antibody



SDS-PAGE Analysis of Calnexin luminal domain (SPP-865) stained with Coomassie. Lane 1: MWM, Lane 2: 0.5 µg; Lane 3: 1 µg; Lane 4: 2 µg; Lane 5: 5 µg

Western Blot Analysis of Calnexin luminal domain (SPP-865) probed with 1:1000 dilution of SPA-865. Lane 1: MWM, Lane 2: 50 ng; Lane 3: 100 ng

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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