

Recombinant Human Calnexin (C-6His)

Catalog No: C566

Description	Recombinant Human Calnexin is produced by our Mammalian expression system and the target gene encoding His21-Pro481 is expressed with a 6His tag at the C-terminus.
Source	Human Cells
Alternative name	Calnexin; IP90; Major Histocompatibility Complex Class I Antigen-Binding Protein p88; p90; CANX
Accession No.	P27824
Predicted Molecular Weight	53.48kDa
AP Molecular Weight	70kDa, reducing conditions.
Formulation	Supplied as a 0.2 µm filtered solution of 20mM Tris-HCl, 150mM NaCl, 2mM CaCl ₂ , 10% Glycerol, pH 7.5.
Reconstitution	<p>Always centrifuge tubes before opening. Do not mix by vortex or pipetting.</p> <p>It is not recommended to reconstitute to a concentration less than 100µg/ml.</p> <p>Dissolve the lyophilized protein in distilled water.</p> <p>Please aliquot the reconstituted solution to minimize freeze-thaw cycles.</p>
Quality Control	<p>Purity: Greater than 95% as determined by reducing SDS-PAGE.</p> <p>Endotoxin: Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.</p>
Shipping	<p>The product is shipped on dry ice/polar packs.</p> <p>Upon receipt, store it immediately at the temperature listed below.</p>
Storage	<p>Store at < -20°C, stable for 6 months after receipt.</p> <p>Please minimize freeze-thaw cycles.</p>

Background

Calnexin/CANX is a single-pass type I membrane protein which belongs to the calreticulin family. It consists of a large N-terminal calcium-binding luminal domain, a single transmembrane helix and a short (90 residues), acidic cytoplasmic tail. The function of calnexin is to retain unfolded or unassembled N-linked glycoproteins in the endoplasmic reticulum. Calnexin is a calcium-binding protein that interacts briefly with newly synthesized glycoproteins in the endoplasmic reticulum. Calnexin may act in assisting protein assembly and/or in the retention within the ER of unassembled protein subunits. Calnexin seems to play a major role in the quality control apparatus of the ER by the retention of incorrectly folded proteins. Calnexin dwindles with aging and might contribute to a cytoprotection in an array of human age-related diseases.

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