

Recombinant Protein Technical Manual Recombinant Human Calnexin/CANX Protein (His Tag) RPES3996

## Product Data:

Product	<b>SKU:</b> RPES3996	
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**Size:** 10µg

Species: Human

Expression host: Human Cells

Uniprot: P27824

## **Protein Information:**

Molecular Mass:	53.5 kDa
AP Molecular Mass:	70 kDa
Tag:	C-6His
Bio-activity:	
Purity:	> 85 % as determined by reducing SDS-PAGE.
Endotoxin:	< 1.0 EU per $\mu g$ as determined by the LAL method.
Storage:	Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.
Shipping:	This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at<-20°C.
Formulation:	Supplied as a 0.2 $\mu$ m filtered solution of 20mM TrisHCl, 150mM NaCl, 2mM CaCl, 10% Glycerol, pH 7.5.
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	
Synonyms:	Calnexin; IP90; Major Histocompatibility Complex Class I Antigen-Binding Protein p88; p90; CANX

## Sequence: His21-Pro481

## 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 lumenal 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.