Recombinant Human Calnexin/CANX protein (His Tag)

Catalog Number: PDEH100903

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

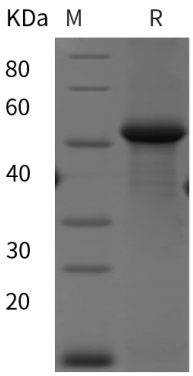
Description

Species	Human
Source	E.coli-derived Human Calnexin protein His21-Leu251, with an N-terminal His
Calculated MW	25.3 kDa
Observed MW	42 kDa
Accession	P27824
Bio-activity	Not validated for activity

Properties

Purity	> 95% as determined by reducing SDS-PAGE.
Endotoxin	< 10 EU/mg of the protein as determined by the LAL method
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 ℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

Data



> 95 % as determined by reducing SDS-PAGE.

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.