

BACKGROUND

Calnexin is a new type of molecular chaperone that interacts with many nascent membrane and soluble proteins of the secretory pathway. It is a calcium-binding, endoplasmic reticulum (ER)-associated protein that interacts transiently with newly synthesized N-linked glycoproteins, facilitating protein folding and assembly. Calnexin is unrelated to molecular chaperones of the Hsp60, Hsp70 and Hsp90 families, and is further distinguished from them in that it is an integral membrane protein.¹ It may also play a central role in the quality control of protein folding by retaining incorrectly folded protein subunits within the ER for degradation.² Alternatively spliced transcript variants encoding this protein have been described.

References:

- Bergeron, J.J.M. et al: *Trend. In Biochem. Sci.* 19:124-28, 1994
- Helenius, A. et al: *Trend in Cell Biol.* 8;193-200, 1997

TECHNICAL INFORMATION

Source:

Calnexin Antibody is a mouse monoclonal antibody raised against a short peptide (CEAAEERPWLWVVYILTVAL) from human Calnexin sequence.

Specificity and Sensitivity:

This antibody detects endogenous Calnexin proteins in normal cell lysates without cross-reactivity with other related proteins.

Storage Buffer: PBS and 30% glycerol

Storage:

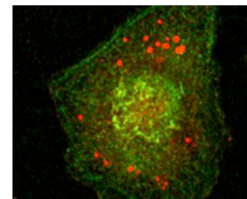
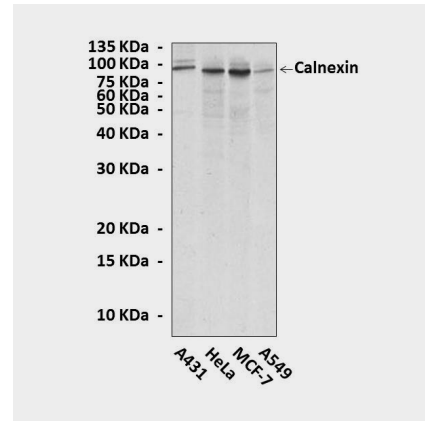
Store at -20°C for at least one year. Store at 4°C for frequent use. Avoid repeated freeze-thaw cycles.

APPLICATIONS

Application:	*Dilution:
WB	1:1,000
IP	1:50
IHC	1:100
ICC	n/d
FACS	n/d

**Optimal dilutions must be determined by end user.*

QUALITY CONTROL DATA



Top: Western Blot detection of Calnexin proteins in various cell lysates using Calnexin Antibody. **Bottom:** This antibody stains HeLa cells in confocal immunofluorescent analysis (Calnexin Antibody: Green).

