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#2679

Calnexin (C5C9) Rabbit mAb

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications: W, W-S, IHC-P, IF-IC	Reactivity: H Mk	Sensitivity: Endogenous	MW (kDa): 90	Source/Isotype: Rabbit IgG	UniProt ID: #P27824	Entrez-Gene Id: 821
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Product Usage Information

Application

Western Blotting
Simple Western™
Immunohistochemistry (Paraffin)
Immunofluorescence (Immunocytochemistry)

Dilution

1:1000
1:50 - 1:250
1:200 - 1:800
1:50 - 1:100

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

For a carrier free (BSA and azide free) version of this product see product #53191.

Specificity/Sensitivity

Calnexin (C5C9) Rabbit mAb detects endogenous levels of total calnexin protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Pro53 of human Calnexin.

Background

Secretory and transmembrane proteins are synthesized on polysomes and translocate into the endoplasmic reticulum (ER) where they are often modified by the formation of disulfide bonds, amino-linked glycosylation and folding. To help proteins fold properly, the ER contains a pool of molecular chaperones including calnexin. Calnexin was first identified as being involved in the assembly of murine class I histocompatibility molecules (1,2). Calnexin is a calcium-binding protein embedded in the ER membrane that retains the newly synthesized glycoproteins inside the ER to ensure proper folding and quality control (3-5). The specificity of calnexin for a subset of glycoproteins is defined by a lectin site, which binds an early oligosaccharide intermediate on the folding glycoprotein (5).

Background References

1. Degen, E. and Williams, D.B. (1991) *J. Cell Biol.* 112, 1099-1115.
2. Ahluwalia, N. et al. (1992) *J. Biol. Chem.* 267, 10914-10918.
3. Rajagopalan, S. et al. (1994) *Science* 263, 387-390.
4. Bergeron, J.J. et al. (1994) *Trends Biochem. Sci.* 19, 124-128.
5. Williams, D.B. (2006) *J. Cell Sci.* 119, 615-623.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **W-S:** Simple Western™ **IHC-P:** Immunohistochemistry (Paraffin) **IF-IC:** Immunofluorescence (Immunocytochemistry)

Cross-Reactivity Key

H: Human **Mk:** Monkey

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