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Certificate of Analysis and Data Sheet

GOAT ANTI CALRETICULIN

With HRP-conjugated secondary antibody

Catalog No.
DS-PB-00345

Species:
Rabbit

Isotype:
Goat IgG

Description

Calnexin and Calregulin (also called calreticulin) are calcium-binding proteins that are localized to the endoplasmic reticulum, Calnexin to the membrane and Calregulin to the lumen. Calnexin is a type I membrane protein that interacts with newly synthesized glycoproteins in the endoplasmic reticulum. It may play a role in assisting with protein assembly and in retaining unassembled protein subunits in the endoplasmic reticulum. Calregulin has both low- and high-affinity calcium-binding sites. Neither Calnexin nor Calregulin contains the calcium-binding "E-F hand" motif found in calmodulins. Calnexin and Calregulin are important for the maturation of glycoproteins in the endoplasmic reticulum and appear to bind many of the same proteins.

Applications

Table Summary of antibody applications and working conditions

Options Functions	YES	NO	Not determined	Recommended Work dilution or concentration
ELISA			•	
Western Blotting	•			1/300 - 1/500
Immunohistology - frozen	•			1/50 - 1/70
Immunohistology - paraffin			•	
Immunohistology - resin			•	
Immunoprecipitation		•		
Flow Cytometry				
Immunofluorescence staining			•	
Neutralization			•	

Note: Other applications are not tested yet. Optimal dilutions should be determined by each laboratory for each application.

**The products are furnished for LABORATORY RESEARCH USE ONLY.
Not for diagnostic or therapeutic use.**



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Preparation

Immunogen was purified rabbit skeletal muscle calreticulin. Antisera to calreticulin were raised by repeated immunisation of goats with highly purified antigen.

Specificity

DS-PB-00345 recognizes calreticulin, a 60kD protein that has vital Ca^{2+} binding functions and is also involved in protein modification and folding within the endoplasmic reticulum. It also has high cross reactivity with Calreticulin derived from human, rat and mouse.

Reconstitution

Supplied as 0.1ml of purified antibody. It is reconstituted with Glycine buffered saline pH7.4.
Please avoid freeze-thaw cycles.

Secondary Antibody Applications

Options Functions	YES	NO	Not determined	Recommended Work dilution or concentration
Immunoassay (ELISA, Western blot)	.			1:5000-1:10000

Storage

Store at -20°C , if not intended for use within a month. Keep it at 4°C and minimize freezing and thawing when use.

Reference

Milner, R.E. *et al.* (1991) Calreticulin and not Calsequestrin, is the major calcium binding protein of smooth muscle sarcoplasmic reticulum and liver endoplasmic reticulum. J. Biol. Chem. 266: 7155-7165.

Michalak, M. *et al.* (1991) Identification and immunolocalization of Calreticulin in pancreatic cells: no evidence for 'Calciosomes'. Exp. Cell. Res. 197: 91-99.

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