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Datasheet for 200-601-D13

Calretinin Antibody

Overview

Description:	Anti-Calretinin (Sheep) Antibody - 200-601-D13
Item No.:	200-601-D13
Size:	100 µL
Applications:	IHC, WB, IF
Reactivity:	Rat, Guinea Pig
Host Species:	Sheep

Product Details

Background:	Calretinin antibody reacts with calretinin which is a calcium-binding protein involved in calcium signaling. Calretinin is abundantly expressed throughout the central nervous system, retina and many other tissues. Studies have shown that calretinin may play a role in neuroprotection by buffering intracellular calcium. Additionally, calretinin selectively stains mesothelial cells thus making it an important marker for differentiating malignant mesothelioma from carcinomas. Anti-Calretinin antibody is ideal for investigators involved in Cell Signaling, Neuroscience, Signal Transduction research.
Synonyms:	CR, Calb2, CAB29, Calretinin
Host Species:	Sheep
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	Calb2
Reactivity:	Rat, Guinea Pig
Immunogen Type:	Native Protein
Immunogen:	Anti-Calretinin Antibody was produced by repeated immunizations with native guinea pig calretinin.

Purity/Specificity:	Anti-Calretinin Antibody is directed against guinea pig Calretinin protein. The antibody was purified from monospecific antiserum by Protein A chromatography. Anti-Calretinin antibody reacts with Calretinin from rat and guinea pig sources. Cross reactivity with Calretinin from other species has not been determined. However, reactivity is also expected from the following species based on 100% sequence homology: human, mouse, non-human primates.
Relevant Links:	• UniProtKB - P47728 • GeneID - 117059 • NCBI - NP_446440.1

Application Details

Tested Applications:	IHC, WB
Suggested Applications:	IF (Based on references)
Application Note:	Anti-Calretinin antibody is tested for use in Western Blotting and IHC. Specific conditions for reactivity should be optimized by the end user. Expect a band of approximately 29 kDa in size corresponding to the calretinin protein in Western blots using rat brain lysate. Use this calretinin antibody for Immunohistochemistry on formalin or paraformaldehyde perfused rat brain tissue sections.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000
IF:	1:500
IHC:	1:500
WB:	1:1000

Formulation

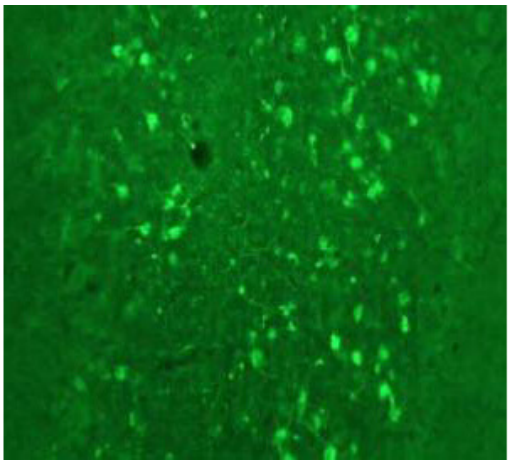
Physical State:	Liquid
Concentration:	Contains antibody for 10 mini-Western blots at suggested dilution Sufficient to run approximately 10 miniblots
Buffer:	0.01 M Tris Cl, 0.15 M Sodium Chloride, 0.001 M EDTA, pH 7.4

Shipping & Handling

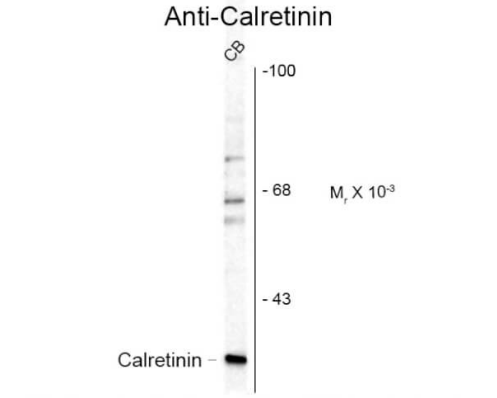
Shipping Condition:	Dry Ice

Storage Condition:	Store vial at -20° C prior to opening. This product is stable at 4° C as an undiluted liquid. For extended storage, aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

Images



Immunofluorescence Microscopy
Immunofluorescence Microscopy of Anti-Calretinin (Sheep) Antibody. Tissue: rat cerebellum. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: Calretinin antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Fluorescein sheep secondary antibody at 1:10,000 for 45 min at RT. Localization: Calretinin is neuronal. Staining: Calretinin as green fluorescent signal.



Western blot of rat cerebellum (CB) lysate showing specific immunolabeling of the ~29k calretinin protein.

Western Blot
Western Blot of Anti-Calretinin (Sheep) Antibody. Lane 1: rat cerebellum lysate. Lane 2: none. Load: 10 µg per lane. Primary antibody: Calretinin antibody at 1:400 for overnight at 4°C. Secondary antibody: IRDye800™ sheep secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: ~ 29kDa/~29kDa for calretinin protein. Other band(s): none.

References

- Molgaard S et al. Immunofluorescent visualization of mouse interneuron subtypes. *F1000Res.* (2014)

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