

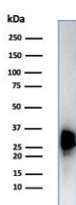
## Calbindin 2 Antibody / CALB2 / Calretinin [clone CALB2/7029R] (V9543)

Catalog No.	Formulation	Size
V9543-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V9543-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V9543SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

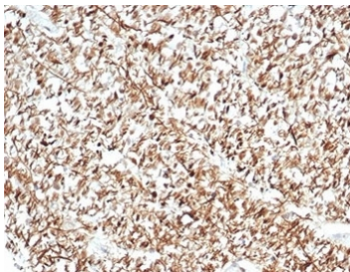
Recombinant **RABBIT MONOCLONAL**

[Bulk quote request](#)

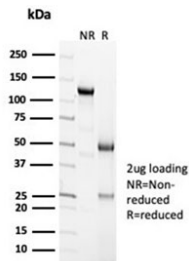
<b>Availability</b>	1-3 business days
<b>Species Reactivity</b>	Human
<b>Format</b>	Purified
<b>Clonality</b>	Recombinant Rabbit Monoclonal
<b>Isotype</b>	Rabbit IgG
<b>Clone Name</b>	CALB2/7029R
<b>Purity</b>	Protein A affinity
<b>UniProt</b>	P22676
<b>Localization</b>	Cytoplasm, Nucleus
<b>Applications</b>	Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml
<b>Limitations</b>	This Calbindin 2 antibody is available for research use only.



Western blot testing of human testis tissue lysate using Calbindin 2 antibody (clone CALB2/7029R). Predicted molecular weight ~29 kDa.

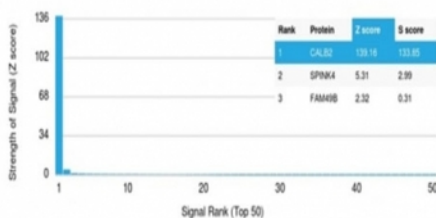


IHC staining of FFPE human brain tissue with Calbindin 2 antibody (clone CALB2/7029R). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.

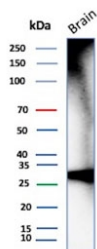


SDS-PAGE analysis of purified, BSA-free Calbindin 2 antibody (clone CALB2/7029R) as confirmation of integrity and purity.

Human Protein Microarray Specificity Validation



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using Calbindin 2 antibody (clone CALB2/7029R). These results demonstrate the foremost specificity of the CALB2/7029R mAb. Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) produces when binding to a particular protein on the HuProt(TM) array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If the targets on the HuProt(TM) are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



Western blot testing of human brain tissue lysate using Calbindin 2 antibody (clone CALB2/7029R). Predicted molecular weight ~29 kDa.

## Description

Calbindin 2 antibody detects calbindin 2, also known as calretinin, a calcium-binding protein encoded by the CALB2 gene. Calbindin 2 is expressed in specific neuronal populations and mesothelial cells, where it regulates calcium signaling and contributes to excitability and differentiation. Because calbindin 2 is a widely used marker in neuroscience and mesothelioma pathology, Calbindin 2 antibody is an important reagent in neuroscience, oncology, and calcium biology.

Calbindin 2 belongs to the EF-hand calcium-binding protein family. It modulates intracellular calcium transients, buffering calcium fluxes to regulate signaling cascades, neuronal excitability, and neurotransmission. In pathology, calretinin expression is used diagnostically to identify mesothelioma and to differentiate it from other pleural malignancies. In neuroscience, calbindin 2 marks subsets of interneurons and sensory neurons, providing insights into neuronal circuits and calcium signaling dynamics.

The Calbindin 2 antibody clone CALB2/7029R provides specific and reproducible recognition. Clone CALB2/7029R has been cited in peer-reviewed publications investigating neurodevelopment, calcium signaling, and mesothelioma pathology. Its reproducibility supports immunohistochemistry, immunoblotting, and immunofluorescence applications.

Research using clone CALB2/7029R has demonstrated how calbindin 2 expression serves as a sensitive and specific marker of mesothelial differentiation, aiding in diagnostic pathology. In neuroscience, this antibody has been used to explore the role of calretinin in interneuron excitability and sensory processing. Studies have also highlighted its involvement in developmental regulation of neural circuits and calcium-dependent signaling mechanisms.

NSJ Bioreagents supplies this Calbindin 2 antibody to support neuroscience, oncology, and calcium biology. Alternate designations include CALB2 antibody, calretinin antibody, calcium-binding protein antibody, mesothelial marker antibody, neuronal calcium buffer antibody, and calbindin D29k antibody.

## **Application Notes**

Optimal dilution of the Calbindin 2 antibody should be determined by the researcher.

## **Immunogen**

A portion of amino acids 23-242 was used as the immunogen for the Calbindin 2 antibody.

## **Storage**

Aliquot the Calbindin 2 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.