

## Calretinin

Cat.No. 214 111BT; Monoclonal mouse antibody, 100 µg purified IgG (lyophilized)

### Data Sheet

Reconstitution/ Storage	100 µg purified IgG, lyophilized, biotin-labeled. . For reconstitution add 100 µl H <sub>2</sub> O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
Applications	<b>WB:</b> yes <b>IP:</b> not tested yet <b>ICC:</b> not tested yet <b>IHC:</b> 1 : 200 up to 1 : 500 <b>IHC-P/FFPE:</b> 1 : 500
Label	biotin
Clone	37C9
Subtype	IgG1 (κ light chain)
Immunogen	Recombinant protein corresponding to AA 1 to 271 from mouse Calretinin (UniProt Id: Q08331)
Epitop	Epitop: AA 1 to 271 from mouse Calretinin (UniProt Id: Q08331)
Reactivity	Reacts with: rat (P47728), mouse (Q08331), human (P22676), zebrafish. Other species not tested yet.
Specificity	Specific for calretinin / calbindin D29k.
matching control	214-1P

**TO BE USED IN VITRO / FOR RESEARCH ONLY**  
**NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS**

Two isoforms of the the vitamin D-dependent Ca-binding proteins have been described so far: **Calretinin**, also referred to as calbindin D29k, calbindin 2, CALB 2, CAL 2, and CAB 29, and calbindin D28k. These proteins are expressed in cells that have to handle a high calcium influx such as brain, bone, teeth, inner ear and others. Calbindins are believed to regulate cellular activity by suppressing or buffering intracellular calcium.

### Selected General References

Influence of the "open field" exposure on calbindin D28K, calretinin, and parvalbumin containing cells in the rat midbrain - developmental study.

Klejbor I, Ludkiewicz B, Domaradzka-Pytel B, Spodnik JH, Dziewiatkowski J, Moryś J  
Journal of physiology and pharmacology : an official journal of the Polish Physiological Society (2006) 57(1): 149-64.

Calbindin D-28 and microtubule-associated protein-2: their use as sensitive immunohistochemical markers of cerebellar neurotoxicity in a regulatory toxicity study.

Haworth R, McCormack N, Selway S, Pilling AM, Williams TC  
Experimental and toxicologic pathology : official journal of the Gesellschaft für Toxikologische Pathologie (2006) 57(5-6): 419-26.

Mutational analysis of dendritic Ca<sup>2+</sup> kinetics in rodent Purkinje cells: role of parvalbumin and calbindin D28k.

Schmidt H, Stiefel KM, Racay P, Schwaller B, Eilers J  
The Journal of physiology (2003) 551(Pt 1): 13-32.

Calbindin in cerebellar Purkinje cells is a critical determinant of the precision of motor coordination.

Barski JJ, Hartmann J, Rose CR, Hoebeek F, Mörl K, Noll-Hussong M, De Zeeuw CI, Konnerth A, Meyer M  
The Journal of neuroscience : the official journal of the Society for Neuroscience (2003) 23(8): 3469-77.

'New' functions for 'old' proteins: the role of the calcium-binding proteins calbindin D-28k, calretinin and parvalbumin, in cerebellar physiology. Studies with knockout mice.

Schwaller B, Meyer M, Schiffmann S  
Cerebellum (London, England) (2002) 1(4): 241-58.

Synthesis of calbindin-D28K during mineralization in human bone marrow stromal cells.

Faucheux C, Bareille R, Amedee J  
The Biochemical journal (1998) 333 ( Pt 3): 817-23.

Calbindin-D in peripheral nerve cells is vitamin D and calcium dependent.

Lee YS, Taylor AN, Reimers TJ, Edelstein S, Fullmer CS, Wasserman RH  
Proceedings of the National Academy of Sciences of the United States of America (1987) 84(20): 7344-8.