NEUROMICS

Calbindin Data Sheet

Catalog Number:	MO20016	**Host:**	Mouse
Ig Class:	IgM,kappa clone: 8A11	**Species Reactivity:**	Human
Immunogen Sequence:	Prokaryotic recombinant protein corresponding to the external domain of the human transforming	**Format:**	Liquid- tissue culture supernatant containing 15mM sodium azide.

Applications: Immunohistochemistry-1:25-1:50 (Paraffin-embedded and frozen tissue)
Trypsin digestion of paraffin sections may enhance staining in some cases.
60 minutes primary antibody incubation at 25° C
Standard ABC technique.

Dilutions listed as a recommendation. Optimal dilution should be determined by investigator.

Storage: Antibody can be aliquotted and stored frozen at -20° C to -70° C in a manual defrost freezer for six months without detectable loss of activity. The antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. *Avoid repeated freeze-thaw cycles.*

Application Notes

Staining Pattern: Membrane (some cytoplasmic staining may be observed in certain cell types eg: lymphoid cells).

Description/Data:
Calbindin is a calcium-binding protein belonging to the troponin C superfamily. It functions as a buffer of cytosolic calcium and is found in the brain, kidney, gut and pancreatic islets. In normal brain, calbindin (28kD) has been identified in medium sized neurons of the neuropil of the matrix compartment of the striatum, the woolly fiber arrangements of the globus pallidus and the fiber structures of the pars reticula of the substantia nigra. The normal expression of calbindin is modified in patients with progressive supranuclear palsy, striatal degeneration and Huntington's disease (HD). In HD, alterations to the dendritic arbors and spiny striatal neurons may be visualized by immunohistochemistry for calbindin. In moderate grades of HD, proliferative changes have been found in these areas and in severe grades, degenerative changes have been noted. A proportion of dendritic cells within the light zone of germinal centers are also noted to be positive for calbindin. Calbindin, via the ventrolateral periaqueductal gray (vlPAG), is thought to play a role in the reactions characteristic of deep pain.

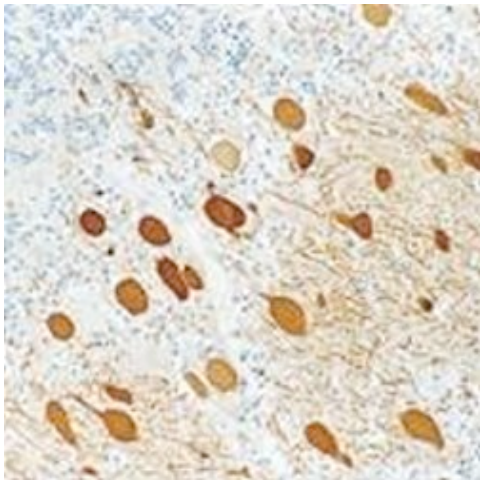

Image: Calbindin staining of Human brain, cerebellum. Note cytoplasmic staining of Purkinje cells and neuronal processes. Paraffin section.

FOR RESEARCH USE ONLY

Neuromics Antibodies • 5325 West 74th Street, Suite 8 • Edina, MN 55439
phone 866-350-1500 • fax 612-677-3976 • e-mail: pshuster@neuromics.com