

CNP₁

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Resilient emotionality and molecular compensation in mice lacking the oligodendrocyte-specific gene Cnp1.

Myelin 2',3'-cyclic nucleotide 3'-phosphodiesterase: active-site ligand binding and molecular conformation.

Edgar NM, Touma C, Palme R, Sibille E

PloS one (2012) 7(2): e32336.

Myllykoski M, Raasakka A, Han H, Kursula P

Translational psychiatry (2011) 1: e42.

Disruption of Cnp1 uncouples oligodendroglial functions in axonal support and myelination.

Lappe-Siefke C. Goebbels S. Gravel M. Nicksch E. Lee J. Braun PE. Griffiths IR. Nave KA

Nature genetics (2003) 33(3): 366-74.

Differential ultrastructural localization of myelin basic protein, myelin/oligodendroglial glycoprotein, and 2',3'-cyclic nucleotide 3'-phosphodiesterase in the CNS of adult rats.

Brunner C. Lassmann H. Waehneldt TV. Matthieu JM. Linington C

Journal of neurochemistry (1989) 52(1): 296-304.

Selected General References

Immunocytochemical localization by electron microscopy of 2'3'-cyclic nucleotide 3'-phosphodiesterase in developing oligodendrocytes of normal and mutant brain.

Braun PE, Sandillon F, Edwards A, Matthieu JM, Privat A

The Journal of neuroscience: the official journal of the Society for Neuroscience (1988) 8(8): 3057-66.

Cat.No. 355 011C5; Monoclonal mouse antibody, 100 µg purified IgG (lyophilized)

Reconstitution/ Storage	100 μ g purified IgG, lyophilized, fluorescence-labeled with Oyster® 650. Rabbit serum albumin was added for stabilization. For reconstitution add 100 μ l H ₂ O to get a 1mg/ml solution in PBS. Either add 1:1 (v/v) glycerol, then aliquot and store at -20°C until use, or store aliquots at -80°C without additives. Reconstitute immediately upon receipt! Avoid bright light when working with the antibody to minimize photo bleeching of the fluorescent dye.The mounting agent Aquatex® (Merck Chemicals) is not compatible with Oyster dyes!
Applications	WB: N/A IP: N/A ICC: 1: 500 IHC: 1: 500 IHC-P/FFPE: not tested yet
Label	Oyster 650
Clone	335C6
Subtype	IgG2a (κ light chain)
Immunogen	Recombinant protein corresponding to AA 1 to 420 from mouse CNP1 (UniProt Id: $P16330$)
Epitop	Epitop: AA 1 to 420 from mouse CNP1 (UniProt Id: P16330)
Reactivity	Reacts with: rat (P13233), mouse (P16330). Other species not tested yet.
Specificity	Specific for CNP 1. (K.O. verified)

Data Sheet

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

The 2', 3'-cyclic nucleotide 3'-phosphodiesterase CNP 1, also referred to as CNPase and CNP, is one of the most abundant membrane-associated enzymes in the myelin sheath of the vertebrate nervous system.

It is assumed that CNP 1 participates in RNA metabolism of myelinating oligodendrocytes.