COSMO BIO CO., LTD.
Inspiration for Life Science

MONOCLONAL ANTIBODY

For research use only, Not for diagnostic use.

Catalog NU-07-003

Anti Neuroglycan C (C1)

BACKGROUND

Neuroglycan C (NGC/CALEB) is a transmembrane-type of chondroitin sulfate proteoglycan with a core glycoprotein of 120 kDa, and is exclusively expressed in the central nervous system. NGC expression is developmentally regulated, and is altered by addiction to psychostimulants as well as by nerve lesions. NGC is a novel part-time proteoglycan that changes its structure from a proteoglycan form to a non-proteoglycan form without chondroitin sulfate side chains during the development of the cerebellum and retina. NGC gene is a potential susceptibility gene for schizophrenia.
This antibody recognizes effectively the core glycoprotein of NGC.

Product type	Primary antibody
Immunogen	Membrane-bound chondroitin sulfate proteoglycans purified from 10-day-old rat brains
Rased in	Mouse (BALB/c)
Myeloma	PAI
Clone number	C1
Isotype	IgG1, λ-chain
Host	-
Source	Serum free culture supernatant
Purification	Affinity purified by Protein G
Buffer	PBS containing 0.02% NaN_3 as a preservative
Concentration	1.0 mg / mL
Volume	200 ul
Label	Unlabeled
Specificity	Rat neurocan C core glycoprotein (approximately 120-150 kDa under reducing conditions)
Cross reactivity	Variety of established and fresh normal cells derived from various animal species. No cross-react with hyaluronic acid, heparin, heparan sulfate, chondroitin, dermatan sulfate and keratin sulfate. This antibody recognizes amino acid residues 33-259 from N-terminal region of rat neuroglycan C core glycoprotein. This antibody inhibits midkine-dependent cell process-extension.
Storage	Shipped at 4°C. Upon arrival aliquot and store at -20°C or below. Aliquot to avoid cycles of freeze/thaw.
Other	**Data Link** : UniProtKB/Swiss-Prot Q9ERQ6

Application notes Recommended dilutions	• **Western blotting**: 1/10,000 • **Immunohistochemistry**: 1/200 (Paraffin section), 1/500 - 1/1000 (Frozen section) • **Immunoprecipitaion**: 1/500 • Other applications have not been tested. Optimal dilutions/concentrations should be determined by the end user.

References

1) Watanabe, E., et al.; J. Biol. Chem, 270, 26876-26882 (1995)
2) Shuo, T., et al.: Glycoconj. J., 20, 257-278 (2004)
3) Oohira, A., et al.: Glycoconj. J., 21, 53-57 (2004)
4) Ichihara-Tanaka, K., et al.: J. Biol. Chem., 281, 30857-30864 (2006)

ANTIBODY CHARACTERIZATION

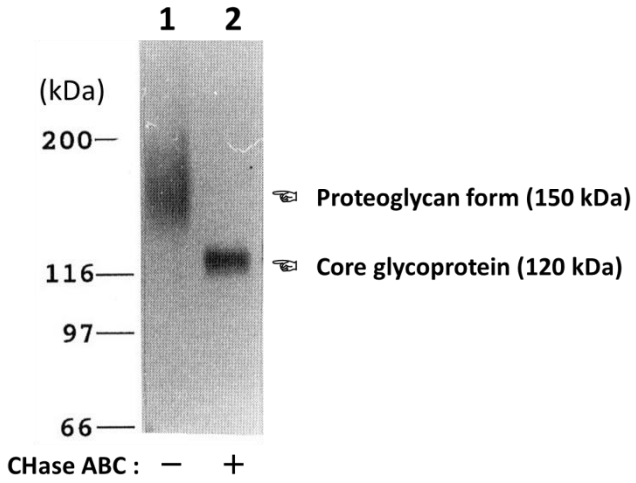

Fig.1 Characterization of the monoclonal anti-neuroglycan C antibody (clone C1)
Immunoblotting using the anti-neuroglycan C antibody of a partially purified preparation of membrane-bound proteoglycans from brains of 10-day-old rats (lane 1), and that digested with chondroitinase ABC (CHase ABC; lane 2).

Reference: J. Biol. Chem., 270 (1995) 26876-26882

RELATED PRODUCTS:

Product Name	Maker	Cat#
Anti Chondroitin Sulfate A (2H6) Monoclonal Antibody	CAC	NU-07-001
Anti Neurocan (1G2) Monoclonal Antibody	CAC	NU-07-002
Anti Neuroglycan C (C1) Monoclonal Antibody	CAC	NU-07-003
Anti N-syndecan Polyclonal Antibody	CAC	NU-07-004
Anti Neurocan peptides Polyclonal Antibody	CAC	NU-07-005

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