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コスモ・バイオ株式会社

Endoneuraminidase-N (Endo-N)

Type : Enzyme **Size** : 50 µl **Cat.N** : AbC0020

Description : Endo-N is an endosialidase which degrades rapidly and specifically linear polymers of sialic acid with α-2,8-linkage with a minimum length of 7-9 residues (Ref 1) characteristic of sialic acid residues associated with NCAM (Ref 2).

Source : phage K1 **Concentration** :200 µg/ml

Activity : 3500 U/mg

Unit Definition : One unit is defined as the amount of enzyme which removes all PSA from $10x10^6$ AtT20 cultured cells in 4h at 37°C.

Product : Purified according to Ref 3. delivered in phosphate buffer diluted 1:2 in glycerol.

Features : The enzyme is stable at 37°C in culture medium ; no proteolytic activity detected on the NCAM molecule at the end of treatment. Dilution recommended for culture cells : 1 :10 000 in cultured medium for 12 h at 37°C.

Applications : Cleavage of PSA on NCAM in physiological conditions. The preparation is not toxic and can be used on live cultured cells (3, 4) , tissue slices (5) or for *in vivo* injections (6).

Storage : Store at –20°C between uses. Stable for at least 3 months

References :

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3. Wang, C., Rougon, G and Kiss, J. (1994) Requirement of polysialic acid for the migration of the O-2A progenitor cell in vitro. J. Neurosci., 53: 4446-4457.

4. Kiss, J., Wang., Olive, S., Rougon, G., Lang. J., Baetens. D., Harry., D., and Pralong, W. (1994): Activity-mobilisation of the adhesion molecule PSA-NCAM to the cell surface of neurons and endocrine cells. EMBO J. 13: 5284-5292.

5. Muller, D., Skibo, G., Toni, N., Cremer, H., Calaora, V., Rougon, G., and Kiss.(1996) PSA-NCAM is required for activity-induced synaptic plasticity. Neuron 17:413-422.

6. Theodosis DT, Bonhomme R, Vitiello S, Rougon G, Poulain DA (1999) Cell surface expression of polysialic acid on NCAM is a prerequisite for activity-dependent morphological neuronal and glial plasticity. J. Neurosci., 19:10228-36.