Active Recombinant Clostridium perfringens Sialidase Cp α-(2-3,6)

Cat. No. Sialidase Cp α-(2-3,6)-013C **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant α(2-3,6) Sialidase Cp from Clostridium perfringens expressed in E. coli. The enzyme has been extensively characterized using oligosaccharide standards.
Species	Clostridium perfringens
Source	E. coli
Description	α(2-3,6) Sialidase Cp cleaves all non-reducing terminal non-branched α(2-3) and α(2-6) sialic acid residues from complex carbohydrates and glycoproteins. There is no detectable activity on α(2-8) or α(2-9) linkages or on branched α(2-3) or α(2-6) linkages. The relative cleavage rates for different linkages are: α(2-3) > α(2-6). α(2-3,6) Sialidase Cp will not cleave branched sialic acids (linked to an internal residue). Use α(2-3,6,8,9) Sialidase Au for α(2-8) or branched sialic acids.
Form	Sterile-filtered solution
EC	3.2.1.18
Specificity	Cleaves all nonreducing terminal non-branched α(2-3) and α(2-6) sialic acid residues from complex carbohydrates and glycoproteins.
Contents	Sialidase Cp in 20 mM Tris-HCl, 25 mM NaCl, pH 7.5 5× Reaction Buffer 250 mM sodium phosphate, pH 6.0

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Bio-activity	Activity: > 15 U/mL Specific Activity: > 250 U/mg Defined as the amount of enzyme required to produce 1 μmole of methylumbelliferone in 1 minute at 37 centigrade, pH 5.0 from MU-NANA [2'-(4-methylumbelliferyl)-α-D-N-acetylneuraminic acid].
Molecular Mass	41 kDa
Suggested usage	1. Add up to 100 μg of glycoprotein or 1 nmol of oligosaccharide to tube. 2. Add water to 14 μL 3. Add 4 μL 5× Reaction Buffer. 4. Add 2 μL α(2-3,6) Sialidase Cp. 5. Incubate at 37 centigrade for 1 hour. Desialylation may be monitored by SDS-PAGE if the size differential between native and desialylated protein is sufficient for detection.
Purity	Neuraminidase Cp is tested for contaminating protease as follows: 10 μg of denatured BSA is incubated at 37 centigrade for 24 hours with 2 μL of enzyme. SDS-PAGE analysis of the treated BSA shows no evidence of degradation. The production host strain has been extensively tested and does not produce any detectable glycosidases.
Applications	•Structural analysis of oligosaccharides •Determining sialic acid linkage •Glycoprotein deglycosylation •Removing heterogeneity from glycoproteins
Stability	Stable at least 24 months when stored properly. Several days exposure to ambient temperatures will not reduce activity.
Storage	Store enzyme at 4 centigrade.
Storage Buffer	The enzyme is provided as a sterile-filtered solution in 20 mM Tris-HCl, 25 mM NaCl (pH 7.5).

GENE INFORMATION

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Synonyms	Neuraminidase; NANase; N-acetylneuraminate glycohydrolase; Exo-α-sialidase

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