



exo- α -SIALIDASE from *Clostridium perfringens* (Lot 150601c)

Recombinant

E-SIALCP

(EC 3.2.1.18) exo- α -sialidase; acetylneuraminyl hydrolase

CAZy Family: GH33

CAS: 9001-67-6

03/19

PROPERTIES

1. ELECTROPHORETIC PURITY:

- Single band on SDS-gel electrophoresis (MW ~ 43,600)
- One major band on isoelectric focusing (pI ~ 6.0)

2. SPECIFIC ACTIVITY:

306 U/mg protein (on pNP- α -D-N-acetylneuraminic acid) at pH 7.0 and 37°C.

One Unit of sialidase activity is defined as the amount of enzyme required to release one μ mole of p-nitrophenol per minute from pNP- α -D-N-acetylneuraminic acid (1 mM) in sodium phosphate buffer (100 mM), pH 7.0 at 37°C

3. SPECIFICITY:

Hydrolysis of unbranched, non-reducing terminal α -2,3-linked, α -2,6-linked \gg α -2,8-linked N-acetylneuraminic acid (NANA; Neu5Ac) residues from glycoproteins and oligosaccharides of glycoconjugates

4. PHYSICOCHEMICAL PROPERTIES:

Recommended conditions of use are at pH 4.5 - 8.0 and 37°C*

5. STORAGE CONDITIONS:

The enzyme is supplied as a solution in 20 mM tris buffer containing 50 mM NaCl₂, 5 mM EDTA and 0.02% (w/v) sodium azide and should be stored at 4°C. For assay, this enzyme should be diluted in sodium phosphate buffer (100 mM), pH 7.0. **Swirl to mix the enzyme immediately prior to use.**

6. DESIALYLATION ASSAY (Suggested):

Glycoprotein or glycan	~ 100 μ g
distilled water (at ~ 25°C)	14 μ L
sodium phosphate (250 mM; pH 6.0)	4 μ L
Sialidase	2 μ L
Mix and incubate for 1hr at ~ 37°C	

7. REFERENCES:

Susanne Kruse, Reinhard G. Kleineidam, Peter Roggentin, & Roland Schauer (1996). Expression and Purification of a Recombinant "Small" Sialidase from *Clostridium perfringens* A99. *Prot. Expr. & Purif.* 7, 415-422.

* Literature values