

New

LIFE SCIENCE



Sialidase

Sialic Acid-Specific Hydrolytic Enzyme

Sialidase from *Arthrobacter ureafaciens*
Sialidase (Neuraminidase) Agarose

1.0Units/vial [I1205]
1vial [I1206]

Advantages

- Exo-type enzyme that specifically hydrolyzes terminal sialic acids on glycans
- Broadly active against α 2-3, α 2-6, and α 2-8 sialic acid linkages
- Useful for analyzing glycan structure and function via sialic acid removal
- Supplied as a frozen solution and ready-to-use immediately after thawing

Sialidase (neuraminidase) is an exoglycosidic enzyme that hydrolyzes and removes terminal sialic acids from glycans. Sialic acids significantly influence the physicochemical properties of glycans and are deeply involved in cell-cell interactions, contributing to the regulation of various physiological and pathological processes. Removing sialic acids alters glycan structures and functions, potentially affecting cellular behavior and disease progression. Sialidase is therefore widely used in fields such as glycan biology, cancer research, and studies of viral infections.¹⁾

Our sialidase is derived from *Arthrobacter* species, and acts broadly on α 2-3, α 2-6, and α 2-8 linked sialic acids. It cleaves sialic acids regardless of linkage type, making it suitable for analyzing glycan modifications, disease-related glycoforms, and cell interaction mechanisms in a variety of research applications.^{2,3)}

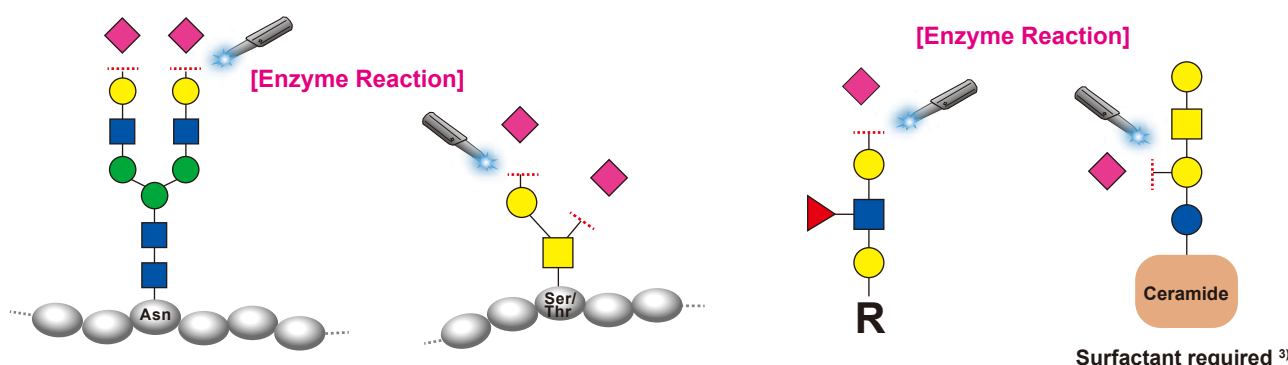
Representative Enzymatic Reactions

N-Linked Glycoprotein

O-Linked Glycoprotein

Blood Group Antigen

Glycolipid



References

- 1) W. Zhu et al., *Cell Death Discov.* **2024**, *10*, 103. <https://doi.org/10.1038/s41420-024-02180-3>
- 2) Y. Uchida et al., *J. Biochem.* **1979**, *86*, 1573. <https://doi.org/10.1093/oxfordjournals.jbchem.a132675>
- 3) K. Sugano et al., *FEBS Lett.* **1978**, *89*, 321. [https://doi.org/10.1016/0014-5793\(78\)80246-4](https://doi.org/10.1016/0014-5793(78)80246-4)

Sialidase: Sialic Acid-Specific Hydrolytic Enzyme

Related Products

Enzyme Substrates

Neu5Ac- α -4MU	50mg [M3031]
BTP3-Neu5Ac Na	1mg [B6529]

Sialic Acid-Binding Lectins

Recombinant <i>Polyporus squamosus</i> lectin (= rPSL1a) expressed in <i>Escherichia coli</i>	1mL [R0225]
rPSL1a-Biotin [for Sia α (2-6)Gal]	1mL [R0230]
rPSL1a-LecBeads [for Sia α (2-6)Gal]	1vial [R0235]

Endo-Type Glycohydrolytic Enzymes

Endo-type N-glycanase [for hydrolysis of biantennary N-glycan]	
endo- β -N-Acetylglucosaminidase (= Endo-M)	100mUnits/vial [A1651]
Glycosynthase (Endo-M-N175Q)	100mUnits/vial [G0365]
Endo-M-W251N	500mUnits/vial [E1339]
Endo-type O-glycanase [for hydrolysis of core1 O-glycan epitope]	
endo- α -N-Acetylgalactosaminidase (= Endo- α)	100mUnits/vial [A1844]
O-Glycosidase for core1 (Endo- α and Sialidase mix)	100mUnits/vial [G0622]
Endo-type glycoceramidase [for hydrolysis of Glycosphingolipid]	
rEGCase I	300mUnits/vial [R0240]
rEGCase II	100mUnits/vial [R0242]
rEGCase I assisted by Activator II	300mUnits/vial [R0241]
rEGCase II assisted by Activator II	100mUnits/vial [R0243]
Endo-type glycosaminoglycanase [for hydrolysis of Keratan sulfate]	
Keratanase II	1.0mUnits/vial [K0069]

Sialic Acid-Related Products

Sialylglycopeptide	10mg [S0523]
Disialyloctasaccharide	10mg [D4065]
SGN	1mg [G0560]
DNS-SGN	1mg [D3690]
Disialylnonasaccharide- β -pNP	1mg [N0913]
Neu5Ac α (2-6) N-Glycan	1mg [N1065]
N-Acetylneuraminic Acid Dimer α (2-8)	10mg [N1163]
N-Acetylneuraminic Acid Trimer α (2-8)	10mg [N1164]
N-Acetylneuraminic Acid Tetramer α (2-8)	5 mg [N1165]
N-Acetylneuraminic Acid Pentamer α (2-8)	5 mg [N1166]
3'-Sialyllactose Sodium Salt	20mg / 100mg [S0885]
6'-Sialyllactose Sodium Salt	20mg / 100mg [S0886]
Sialyl Lewis X-lactose	1mg / 5mg [I1317]
Ganglioside GM ₁	Contact us. [G0483]
Ganglioside GM ₃	Contact us. [G0489]
SialylGb ₅ Ceramide	1mg / 5mg [G0593]

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