

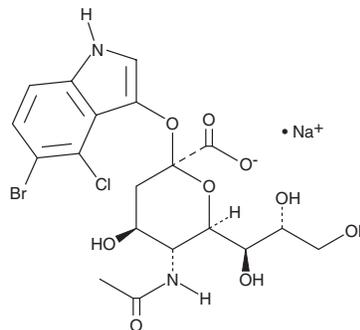
# PRODUCT INFORMATION



## X-NeuNAc

Item No. 24206

**CAS Registry No.:** 160369-85-7  
**Formal Name:** N-acetyl-2-O-(5-bromo-4-chloro-1H-indol-3-yl)- $\alpha$ -neuraminic acid, monosodium salt  
**MF:** C<sub>19</sub>H<sub>21</sub>BrClN<sub>2</sub>O<sub>9</sub> • Na  
**FW:** 559.7  
**Purity:**  $\geq$ 98%  
**UV/Vis.:**  $\lambda_{\text{max}}$ : 235, 293 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:**  $\geq$ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

X-NeuNAc is supplied as a crystalline solid. A stock solution may be made by dissolving the X-NeuNAc in the solvent of choice, which should be purged with an inert gas. X-NeuNAc is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of X-NeuNAc in these solvents is approximately 0.25, 20, and 15 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of X-NeuNAc can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of X-NeuNAc in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

X-NeuNAc is a chromogenic substrate for neuraminidases, which are enzymes that cleave glycosidic linkages of neuraminic acids.<sup>1</sup> Upon hydrolysis by neuraminidase, halogenated indol-3-ol is released and undergoes rapid aerobic oxidation to the dark blue pigment 5,5'-dibromo-4-4'-dichloroindigo, which can be used to quantify neuraminidase activity.

### Reference

1. Fujii, I., Iwabuchi, Y., Teshima, T., *et al.* X-Neu5Ac: A novel substrate for chromogenic assay of neuraminidase activity in bacterial expression systems. *Bioorg. Med. Chem.* **1(2)**, 147-149 (1993).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 10/31/2022

#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897  
[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM