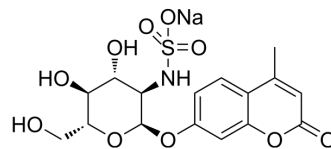


## 4-MU- $\alpha$ -GlcNS sodium

Cat. No.:	HY-D1632
CAS No.:	460085-45-4
Molecular Formula:	C <sub>16</sub> H <sub>18</sub> NNaO <sub>10</sub> S
Molecular Weight:	439.37
Target:	Fluorescent Dye
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

#### Description

4-MU- $\alpha$ -GlcNS sodium is a fluorogenic substrate of heparin sulphamidase, is desulfurized into 4-MU- $\alpha$ -GlcNH<sub>2</sub>. 4-MU- $\alpha$ -GlcNH<sub>2</sub> can liberate 4-methylumbelliferone (4-MU, fluorescent product) via  $\alpha$ -glucosaminidase catalysis, with the emission wavelength maxima of 445-454 nm. 4-MU- $\alpha$ -GlcNS sodium can be used to heparin sulphamidase deficiencies associated with Mucopolisaccharidosis IIIA and other lysosomal disorders researches<sup>[1][2][3]</sup>.

### REFERENCES

- [1]. Karpova EA, et al. A fluorimetric enzyme assay for the diagnosis of Sanfilippo disease type A (MPS IIIA). *J Inherit Metab Dis.* 1996;19(3):278-85.
- [2]. Dasgupta F, et al. Synthesis of 7-O-(2-deoxy-2-sulfamido- $\alpha$ -D-glucopyranosyl)-4-methylcoumarin sodium salt: a fluorogenic substrate for sulfamidase. *Carbohydr Res.* 2002 Jun 5;337(11):1055-8.
- [3]. G. Civallero, et al. Assay of heparan-N-sulfamidase in dried leukocytes impregnated in filter paper: A new tool for the identification of Mucopolisaccharidosis IIIA and potentially other lysosomal disorders, *Molecular Genetics and Metabolism.* 2013;108(4): 267-268.

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA