

Product Information

4-Methylumbelliferyl N-acetyl-β-D-glucosaminide

Catalog Number **M2133**

Storage Temperature -20 °C

CAS RN 37067-30-4

Product Description

Molecular Formula: C₁₈H₂₁NO₈

Molecular Weight: 379.36

This product is a fluorogenic substrate for β-N-acetylhexosaminidase. When this product is used as a substrate, the released, free 4-methylumbelliferone is measured in alkaline pH. The fluorescence is measured in 0.1 M glycine buffer, pH 10, at an emission wavelength of 448 nm with excitation at 362 nm. The fluorescence at pH 10.3 is ~100 times that observed at pH 7.0.^{1,2}

This product is synthetically prepared.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

This product is soluble in DMF (20 mg/ml). It is also reported to be soluble in DMSO (18 μM) and 2-methoxyethanol. A solution can also be prepared at 1 mg in 2.6 ml of 0.05 M citrate buffer, pH 5.³

References

1. Strachan, R. et al., J. Org.Chem., **27**, 1074, (1962).
2. Snavely, B.B. et al., Applied Physics Letters, **11**, 975 (1967).
3. Clinical Orthopedics and Related Research, **322**, 268 (1996).

CMH,NSB,AI,MAM 06/17-1