

Ac4ManNAz (N-Azidoacetylmannosamine-tetraacylated)

http://www.lumiprobe.com/p/tetraacetyl-n-azidoacetylmannosamine-ac4mannaz

The tetraacetylated N-Azidoacetyl-mannosamine (Ac4ManNAz) is an azide-labeled monosaccharide that provides a highly specific tool for studying glycoproteins through metabolic labeling *in vivo* and subsequent chemoselective ligation.

Ac4ManNAz is cell-permeable unnatural sugar that is intracellularly processed and incorporated instead of its natural monosaccharide counterpart N-Acetylmannosamine (ManNAc).

The resulting azide-contained glycoprotein can be detected via <u>Cu(I)-catalyzed (CuAAC)</u> or <u>copper-free (SPAAC)</u> click reaction with either fluorescent-labeled <u>alkynes/cycloalkynes</u> or <u>biotin-alkyne</u>.

The recommended concentration for cell labeling is 25-75 μ M, and this concentration range may be a starting point for an individual experiment setup.



Structure of Ac4ManNAz

General properties

| Appearance: | white solid |
|---------------------|---|
| Molecular weight: | 430.37 |
| CAS number: | 361154-30-5 |
| Molecular formula: | $C_{16}H_{22}N_4O_{10}$ |
| Solubility: | Soluble to 100 mM in DMSO |
| Quality control: | NMR ¹ H and HPLC-MS (95+%) |
| Storage conditions: | 24 months after receival at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate. |
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