DATA SHEET





Ac4ManNAz

N-azidoacetylatedmannosamine-tetraacylated (Ac4ManAz)

Cat. No.	Amount
CLK-1084-5	5 mg
CLK-1084-25	5 x 5 mg
CLK-1084-100	100 mg



Structural formula of Ac4ManNAz

For general laboratory use.

Shipping: shipped at ambient temperature

Storage Conditions: store at -20 °C

Shelf Life: 12 months after date of delivery

Molecular Formula: $C_{16}H_{22}N_4O_{10}$

Molecular Weight: 430.37 g/mol

Exact Mass: 430.13 g/mol

CAS#: 361154-30-5

Purity: mass identification (ESI-MS)

Form: oil

Color: off-white to grey

Solubility: DMSO, DMF, MeOH

Applications:

Glycoconjugate synthesis monitoring by metabolic labeling

Description:

The tetraacetylated N-Azidoacetyl-mannosamine (Ac₄ManNAz) provides a non-radioactive alternative for glycoconjugate visualization. It is cell-permeable, intracellularly processed and incorporated instead of its natural monosaccharide counterpart N-Acetylmannosamine(ManNAc).

The resulting Azide-functionalized glycoconjugates can subsequently be detected via Cu(I)-catalyzed or Cu(I)-free Click Chemistry that offers the choice to introduce a Biotin group (via Azides of Biotin or DBCO-containing Biotin, respectively) for subsequent purification tasks or to introduce fluorescent group (via Azides of fluorescent dyes or DBCO-containing fluorescent dyes, respectively) for subsequent microscopic imaging.

Recommended concentration for metabolic labeling: 25-75 µM. This concentration range may serve as a starting point for an individual assay set-up.

Selected References:

Spiciarich et al. (2017) Bioorthogonal Labeling of Human Prostate Cancer Tissue Slice Cultures for Glycoproteomis. Angew. Chem. Int. Ed.**129**:1.

