

## Product Datasheet

### Ac4ManNAz (orb1734949)

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Catalog Number</b>    | orb1734949                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Category</b>          | Small Molecules                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Description</b>       | <p>The tetraacetylated N-Azidoacetyl-mannosamine (Ac 4ManNAz) 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 M. This concentration range may serve as a starting point for an individual assay set-up.</p> |
| <b>Form/Appearance</b>   | oil; Color: off-white to grey                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Purity</b>            | mass identification (ESI-MS)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>MW</b>                | Theoretical MW: 430.37 g/mol; Detected MW: 430.13 g/mol                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Application notes</b> | Glycoconjugate synthesis monitoring by metabolic labeling.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Solubility (25°C)</b> | DMSO, DMF, MeOH                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>CAS Number</b>        | 361154-30-5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Formula</b>           | C <sub>16</sub> H <sub>22</sub> N <sub>4</sub> O <sub>10</sub>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>SMILES</b>            | <chem>[C@H]1([C@@H](C(O[C@@H]([C@H]1OC(=O)C)COC(=O)C)OC(=O)C)NC(=O)CN=[N+]=[N-])OC(=O)C</chem>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Storage</b>           | store at -20 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

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|                        |                                 |
|------------------------|---------------------------------|
| <b>Note</b>            | For research use only           |
| <b>Expiration Date</b> | 12 months from date of receipt. |

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