

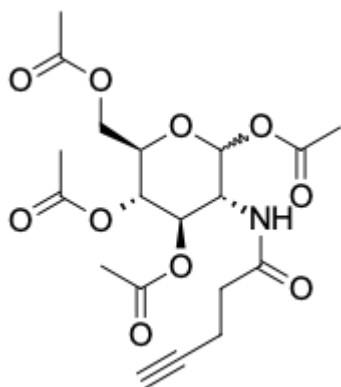
## Ac4GlcNAI (N-4-pentynoyl-glucosamine-tetraacylated)

<http://www.lumiprobe.com/p/n-4-pentynoyl-glucosamine-tetraacylated-ac4glcnaI>

The tetraacetylated N-(4-pentynoyl)-glucosamine (Ac4GlcNAI) is an alkyne-labeled monosaccharide that provides a highly specific tool for studying glycoproteins through metabolic labeling *in vivo* and subsequent chemoselective ligation.

Ac4GlcNAI is cell-permeable unnatural sugar that is intracellularly processed and incorporated instead of its natural monosaccharide counterpart N-acetylglucosamine (GlcNAc).

The resulting alkyne-contained glycoprotein can be detected via [Cu\(I\)-catalyzed \(CuAAC\)](#) click reaction with either fluorescent-labeled [azides](#) or [biotin-azide](#).



**Structure of Ac4GlcNAI (N-4-pentynoyl-glucosamine-tetraacylated)**

### General properties

Appearance:	beige powder
Molecular weight:	427.41
CAS number:	1361993-37-4
Molecular formula:	C <sub>19</sub> H <sub>25</sub> NO <sub>10</sub>
IUPAC name:	2-deoxy-2-[(1-oxo-4-pentyn-1-yl)amino]-2-deoxy-1,3,4,6-tetra-O-acetyl-D-glucopyranose
Solubility:	DMSO, DMF, DCM, THF, chloroform
Quality control:	NMR <sup>1</sup> H and HPLC-MS (95+%)
Storage conditions:	24 months after receipt at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate.
Legal statement:	Product is offered and sold for research purposes only. Product is not tested for safety and efficacy in food, drug, medical device, cosmetic, no express or implied authorization to use for any other purpose, including, without limitation, in vitro diagnostic purposes, for humans or animals or for commercial purposes.