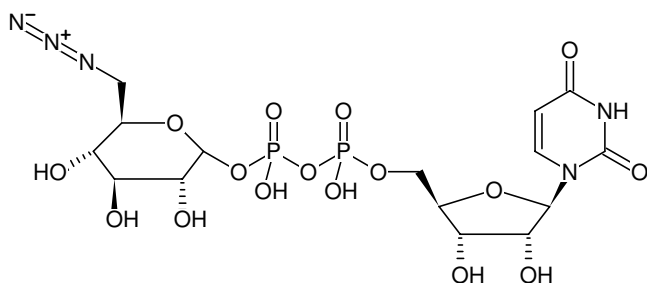




UDP-6-azide-glucose

Sodium salt
UDP-6-N₃-Glc, 6-N₃-UDPG

Cat. No.	Amount
CLK-076	0,5 mg



Structural formula of UDP-6-azide-glucose

For general laboratory use.

Shipping: shipped on gel packs

Storage Conditions: store at -20 °C

Short term exposure (up to 1 week cumulative) to ambient temperature possible.

Shelf Life: 12 months after date of delivery

Molecular Formula: C₁₅H₂₃N₅O₁₆P₂ (free acid)

Molecular Weight: 591.32 g/mol (free acid)

Exact Mass: 591.06 g/mol (free acid)

Purity: ≥ 98 % (HPLC)

Form: solid

Color: white to off-white

Solubility: water, aqueous buffer such as PBS

Applications:

Glycosylation of 5-hydroxymethylcytosine (5-hmC) with T4 β-Glycosyltransferase (T4 β-GT)^[1-3]

The resulting azide-functionalized, glycosylated 5-hmC moiety can subsequently be detected via Cu(I)-free click chemistry that offers the choice

- to introduce a (Desthio)Biotin group for subsequent purification tasks (via DBCO-containing (Desthio)Biotin)
- to introduce fluorescent group for subsequent microscopic imaging (via DBCO-containing fluorescent dyes)

0.5 mg UDP-6-azide-glucose are sufficient to prepare 283 μl of a 3 mM solution.

Selected References:

- [1] Song *et al.* (2011) Selective chemical labeling reveals the genome-wide distribution of 5-hydroxymethylcytosine. *Nature Biotech* **29**(1):68.
- [2] Li *et al.* (2012) Selective Capture of 5-hydroxymethylcytosine from Genomic DNA. *J. Vis. Exp.* **68**:e44441.
- [3] Song *et al.* (2016) Simultaneous single-molecule epigenetic imaging of DNA methylation and hydroxymethylation. *PNAS* **113**(16):4339.