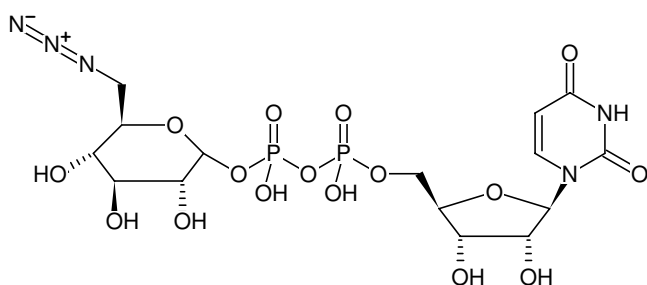


**UDP-6-azide-glucose**

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 research use only!****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:** C<sub>15</sub>H<sub>23</sub>N<sub>5</sub>O<sub>16</sub>P<sub>2</sub>**Molecular Weight:** 591.32 g/mol**Exact Mass:** 591.06 g/mol**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)<sup>[1-3]</sup>

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.