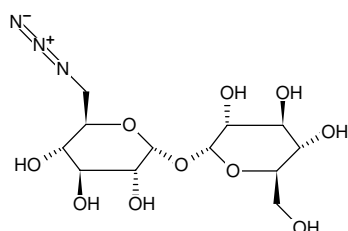




## 6-Azido-Trehalose

6-TreAz

Cat. No.	Amount
CLK-078	1 mg



Structural formula of 6-Azido-Trehalose

**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<sub>12</sub>H<sub>21</sub>N<sub>3</sub>O<sub>10</sub>**Molecular Weight:** 367.31 g/mol**Exact Mass:** 367.12 g/mol**Purity:** ≥ 90 % (TLC)**Form:** solid**Color:** white to off-white**Solubility:** water, DMSO**Applications:**

Metabolic Lipopolysaccharide labeling of Myobacteria

**Description:**

Myobacteria are characterized by a trehalose-lipopolysaccharide-containing outer cell membrane.

The Azide-functionalized 6-Azido-Trehalose provides an attractive approach for the detection of *Myobacteria* in living cultures: It is cell-permeable, intracellularly processed and incorporated instead of its natural counterpart.

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

Myobacteria strains tested<sup>[1]</sup>:

*Mycobacterium smegmatis* mc2155, *Mycobacterium tuberculosis* H37Rv, *Mycobacterium bovis* BCG

**Selected References:**

[1] Swarts *et al.* (2012) Probing the Mycobacterial Trehalome with Bioorthogonal Chemistry. *J. Am. Chem. Soc.* **134** (39):16123.