

**5-DBCO-PEG<sub>4</sub>-dUTP**5-Dibenzylcyclooctyl-PEG<sub>4</sub>-uridine-5'-triphosphate, Triethylammonium salt

Cat. No.	Amount
CLK-048-S	50 µl (10 mM)
CLK-048-L	5 x 50 µl (10 mM)

**Applications:**

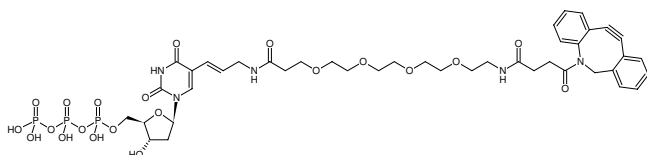
Incorporation into DNA/cDNA by

- PCR with *Taq* polymerase <sup>in-house data</sup>

**Description:**

5-DBCO-PEG<sub>4</sub>-dUTP is recommended for two-step labeling of DNA/cDNA e.g. by PCR. It is enzymatically incorporated into DNA/cDNA as substitute for its natural counterpart dTTP. The resulting DBCO-functionalized DNA/cDNA can subsequently be labeled via Cu(I)-free click chemistry that offers the choice

- to introduce a Biotin group (via Azides of Biotin) for subsequent purification tasks
- to introduce fluorescent group (via Azides of fluorescent dyes) for subsequent microscopic imaging
- to crosslink the DNA to Azide-functionalized biomolecules e.g. proteins

Structural formula of 5-DBCO-PEG<sub>4</sub>-dUTP**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:** C<sub>42</sub>H<sub>54</sub>N<sub>5</sub>O<sub>21</sub>P<sub>3</sub> (free acid)**Molecular Weight:** 1057.83 g/mol (free acid)**Exact Mass:** 1057.25 g/mol (free acid)**Purity:** ≥ 95 % (HPLC)**Form:** solution in 100 mM Tris-HCl**Color:** colorless to slightly yellow**Concentration:** 10 mM - 11 mM**pH:** 7.5 ± 0.5**Spectroscopic Properties:** λ<sub>max</sub> 289 nm, ε 12.5 L mmol<sup>-1</sup> cm<sup>-1</sup> (Tris-HCl pH 7.5)