Cyanine7 azide

Cyanine7 azide is a near-infrared fluorescent dye azide for Click Chemistry labeling, an analog of Cy7® azide.

This product can be used for the incorporation of Cyanine7 into various alkynylated biomolecules via Click Chemistry. Post-synthetic modification of oligonucleotides is also possible with this azide.

Cyclohexane-bridged polymethyne chain allows for 20% increase in quantum yield (compared to parent non-bridged structure).

![Cyanine7 azide structure](image1)

![Cyanine7 absorbance and emission spectra](image2)

**General properties**
- **Appearance:** green powder / solution
- **Molecular weight:** 667.33
- **Molecular formula:** C₄₀H₅₁ClN₆O
- **Solubility:** soluble in organic solvents (DMSO, DMF, dichloromethane), low solubility in water
- **Quality control:** NMR ¹H, HPLC-MS (95%)
- **Storage conditions:** Storage: 24 months after receival at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Avoid prolonged exposure to light. Desiccate.

**Spectral properties**
- **Excitation maximum, nm:** 750
- **ε, L⋅mol⁻¹⋅cm⁻¹:** 199000
- **Emission maximum, nm:** 773
- **Fluorescence quantum yield:** 0.3
- **CF₂₆₀⁻:** 0.022
- **CF₂₈₀⁻:** 0.029

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