



Data Sheet (01.02.2011)

# Chromeo™ 642-Azide

substitute for Cy5

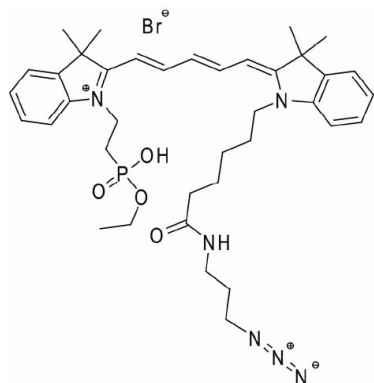
Click Chemistry

Cat.-No.	Amount
mi-C1006S	1 mg
mi-C1006M	5 mg

Only for *in vitro* use!

For research only!

## Structure

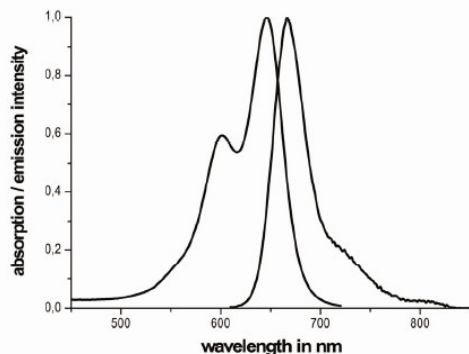


## Spectroscopic data

Excitation maximum: Ex = 646 nm

Emission maximum: Em = 667 nm

Extinction coefficient: 170000 cm<sup>-1</sup> M<sup>-1</sup>



Excitation and emission spectrum of Chromeo™ 642-Azide

**Molecular formula:** C<sub>38</sub>H<sub>52</sub>N<sub>6</sub>O<sub>4</sub>P(Br)

**Molecular weight:** 687.8 (767.7) g/ mol

**Purity:** >95 %

**Appearance:** blue powder

**Solubility:** DMSO, DMF, EtOH, MeOH

**Storage conditions:** store at -20 °C, dark, inert gas

## Description

The Click reaction is a copper(I)-catalyzed azide-alkyne cycloaddition that permits DNA labeling with very high efficiency. Alkyne-modified DNA can be generated by PCR using alkyne-containing nucleotides (mi-N300X). These alkyne groups allow the attachment of fluorescent and non-fluorescent azides to the PCR product by click chemistry (mi-Click Chemistry Manual, mi-C1101 CuBr, mi-C1102 TBTA-Ligand, mi-C1103 DMSO/t-Butanol Solvent). Custom synthesized oligos which are already alkyne-modified can be ordered from metabion and can be labeled with the marker azides as well.

## Reference

*Journal of Fluorescence* **2005**, *15*, 207-214.