Data Sheet (30.05.2014)

6-FAM Azide

6-Carboxyfluorescein Azide

Click Chemistry

Cat.-No.	Amount
mi-C1001S	1 mg
mi-C1001M	5 mg

Only for *in vitro* use!
For research only!

Molecular formula: $C_{24}H_{18}N_4O_6$

Molecular weight: 458.43 g/ mol

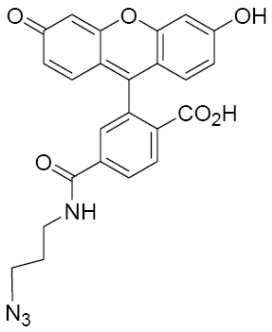
Purity: >95 %

Appearance: orange solid

Solubility: DMSO, DMF, MeOH

Storage conditions: store at -20 °C

Structure

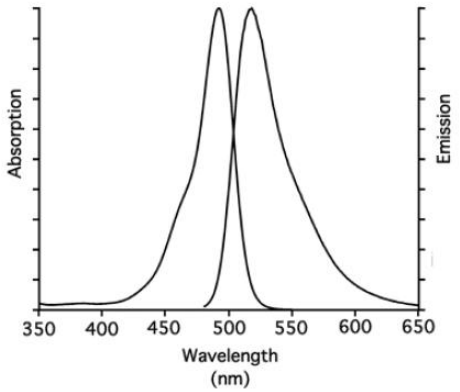


Description

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.

Spectroscopic data

Excitation maximum: Ex = 496 nm
Emission maximum: Em = 516 nm
Extinction coefficient: 83000 cm^{-1} M^{-1}



Excitation and emission spectrum of 6-FAM

References

Angew. Chem. Int. Ed. **2008**, *47*, 3442 –3444; *Angew. Chem. Int. Ed.* **2008**, *47*, 8350-8358; *Tetrahedron Lett.* **2005**, *46*, 1691-1695