## Product number: K8-7046

## General Data

Molecular Mass: 1023.19

Solubility: water, alcohol, DMF, DMSO
Insoluble: acetone, chloroform, toluene
Storage: Store in absence of light, desiccated and refrigerate

## Description

- Hydrophilic, alkyne-reactive, long-lifetime reagent for click chemistry containing one azide function. Azides react with C三C-triple bonds in either a $\mathrm{Cu}(\mathrm{I})$-catalyzed or Cu -free 1,3-dipolar cycloaddition reaction to triazole.


## Applications

- Click Chemistry reagent
- Fluorescence intensity and fluorescence polarization-based applications
- Resonance Energy Transfer (RET)


## Advantages

- Perfectly suited for excitation with the 680,700 or 750 nm diode lasers
- Sensitive; high extinction coefficients and high quantum yields
- pH-insensitive between pH 3 and pH 10
- Good aqueous solubility: this label does not alter the solubility of the bioconjugate
- Photostability: Higher photostability as compared to $\mathbf{C y 7}{ }^{\text {TM }}$
- Low molecular weight: Seta dyes do not add substantial mass to the conjugates
- Ideal for non-radioactive labeling of alkyne-modified proteins, DNA and oligonucleotides


## Spectral Data

Solvent System: phosphate buffer pH 7.4

| Sample | Absorption <br> max. <br> $[\mathrm{nm}]$ | Extinction <br> Coefficient <br> $\left[\mathrm{M}^{-1} \mathrm{~cm}^{-1}\right]$ | Fluorescence <br> max. <br> $[\mathrm{nm}]$ | Quantum <br> Yield <br> $[\%]$ |
| :---: | :---: | :---: | :---: | :---: |
| Free dye | 750 | 200,000 | 779 | 22 |

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[^1]
[^0]:    ${ }^{1}$ Excitation at 490 nm

[^1]:    Absorption and emission spectrum of a Seta-650-Azide in phosphate buffer (pH 7.4)

