

Product number: K8-7045
Product name: Seta-750-DBCO

General Data

- Molecular Mass:** 1429.83
1171.34 (protonated form)
- Solubility:** Water, Alcohol, DMF, DMSO
- Insoluble:** Acetone, Chloroform, Toluene
- Storage:** Store in absence of light, desiccate and refrigerate

Description

- Seta 750-DBCO (K8-7045)** is a highly hydrophilic click chemistry reagent containing one dibenzocyclo-octyne (DBCO) group for strain-mediated cycloaddition reactions with azides. It features the same excitation and emission wavelengths as **Cy7**, **Alexa Fluor™ 750** or **Seta 750** and can therefore be used with these filter sets. It combines high photostability and brightness.

Applications

- Strain-mediated click chemistry reactions with azide-modified reagents and biomolecules.

Advantages

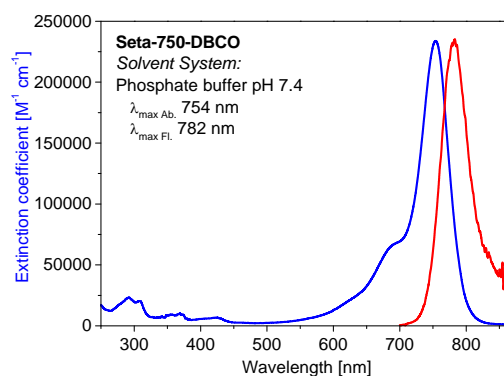
- Perfectly suited for excitation with the 680, 700 or 750 nm diode lasers
- Sensitive; high extinction coefficients and high quantum yields (about twice as high as **Alexa 750**)
- pH-insensitive between pH 3 and pH 10
- Good aqueous solubility
- High photostability; e.g. compared to fluorescein, **Cy7** or **Alexa 750**
- Low molecular weight — **Seta-750** does not add substantial mass to the conjugates

Spectral Data

Solvent System: phosphate buffer pH 7.4

Sample	Absorption max. [nm]	Extinction Coefficient [$M^{-1}cm^{-1}$]	Fluorescence max. [nm]	Quantum Yield ¹ [%]
Free dye	754	235,000	782	21

¹ Excitation at 700 nm



Absorption and emission spectrum of **Seta-750-DBCO** in phosphate buffer (pH 7.4)