SETA BioMedicals
http://www.setabiomedicals.com
e-mail: info@setabiomedicals.com

Product number: K9-4154
Product name: SeTau-647-DBCO

General Data

Molecular Mass: 2012.65

1621.90 (protonated form without counterions)

Solubility: Water, Alcohol, DMF

Insoluble: Acetone, Chloroform, Toluene

Storage: Store in absence of light, desiccate and refrigerate

Description

SeTau 647-DBCO (K9-4154) is an extremely bright, hydrophilic click chemistry reagent containing one dibenzylcyclooctyne (DBCO) group for strain-mediated cycloaddition reactions with azides. It has the same excitation wavelength as **Cy5**, **Alexa Fluor™ 647** and can therefore be used with these filter sets. Its emission is at 695 nm.

Applications

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

Advantages

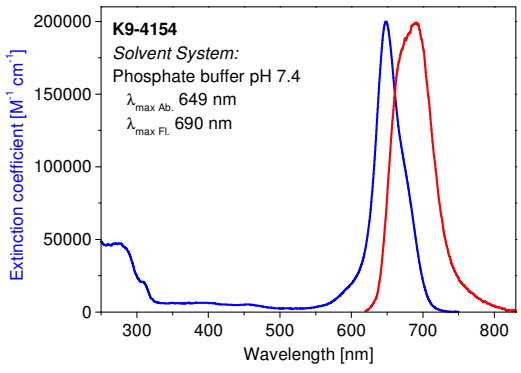
- Suited for excitation with the 647 nm Kr-laser or 650 nm diode laser
- Sensitive; high extinction coefficients and high quantum yields (about twice as high as **Alexa 647**)
- pH-insensitive between pH 3 and pH 10
- Good aqueous solubility;
- High photostability; e.g. compared to fluorescein, **Cy5** or **Alexa 647**
- Low molecular weight - **SeTau-647-DBCO** does not add substantial mass to the conjugates

Spectral Data

Solvent System: phosphate buffer pH 7.4

Sample	Dye-to-protein Ratio	Absorption max. [nm]	Extinction Coefficient [M^{-1}·cm^{-1}]	Emission* max. [nm]	Quantum Yield [%]
Free dye	-	649	200,000	690	60

* Excitation at 620 nm



Absorption and emission spectrum of **K9-4154**
in phosphate buffer (pH 7.4)