Biotium
Glowing Products for Science™

3159 Corporate Place
Hayward, CA 94545
www.biotium.com

Revised: May 3, 2013

Product Information

Cyanine Dye, Succinimidyl Ester

Unit Size: 1 mg, 10 mg

Technical Summary

Cat. No.	Dye	Ex/Em (nm)	MW	Replacement for
90016	Cyanine 555	555/565	829	Cy®3
90025	Cyanine 647	650/665	855	Cy®5
90048	Cyanine 680	681/698	1318	Cy®5.5
90049	Cyanine 750	755/777	881	Cy®7

Storage and Handling
Store cyanine dye, succinimidyl ester at -20°C, protected from moisture and light. Product is stable for at least 6 months from date of receipt if stored as recommended.

Solubility
Soluble in H_2O, DMF, or DMSO. For making stock solutions, we recommend dissolving the dye in anhydrous DMSO (Biotium cat# 90082) at 10 mM. Stock solutions prepared in anhydrous DMSO can be stored at ≤ -20°C for at least one month. Stock solutions may also be prepared in dH_2O or other aqueous buffer. However, because the succinimidyl ester reactive group will hydrolyze slowly in water, stock solutions in water should be prepared immediately before the conjugation reaction and cannot be stored for later use.

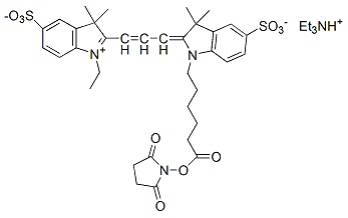
Product Description
Biotium's cyanine dyes are structurally identical to Cy® dyes from GE Healthcare. Cyanine dye succinimidyl esters can be used to conjugate to lysine residues in proteins or other biomolecules with a free amine group. The succinimidyl ester group of the dye reacts with an amine group to form a stable amide linkage.

Related Products
Biotium also offers a line of next-generation fluorescent CF™ dyes for labeling proteins and nucleic acids, with advantages in brightness, photostability, and water solubility compared to other fluorescent dyes. You may also be interested in the following related products from Biotium:

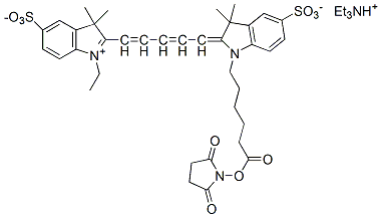
- CF™ dye succinimidyl (NHS) ester, hydrazide, maleimide, amine, aminooxy, alkyne, and azide derivatives
- CF™ dye protein labeling kits and Mix-n-Stain™ antibody labeling kits.
- CF™ dye secondary antibody conjugates and other bioconjugates
- Please visit our website at www.biotium.com for details.

Materials from Biotium are sold for research use only, and are not intended for food, drug, household, or cosmetic use.

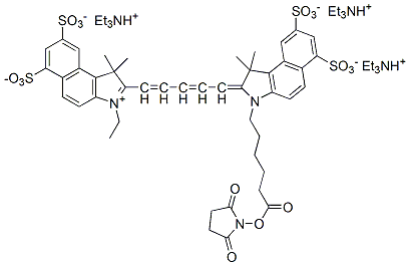
Chemical Structures



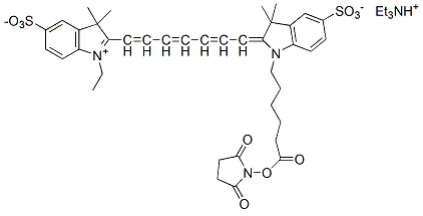
Cyanine 555



Cyanine 647



Cyanine 680



Cyanine 750