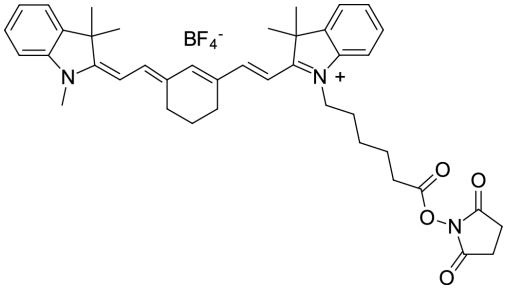
Product Data Sheet

Product Name: Cyanine7 NHS ester
Cat. No.: GC59159

Chemical Properties

Cas. No.	2408482-09-5		
Formula	$C_{41}H_{48}N_3BF_4O_4$	M.Wt	733.64
Solubility	soluble in organic solvents (DMSO, DMF, dichloromethane), low solubility in water	Storage	Storage: 12 months after receival at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Avoid prolonged exposure to light. Desiccate.
General tips	For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		

Structure



Background

Amine reactive Cyanine7, near infrared fluorescent dye, an improved analog of Cy7®.

NIR fluorophores can be used to take advantage of near infrared window of biological tissues - increased transparency of tissues in this spectral region allows to carry out in vivo imaging.

This reagent can be utilized to produce Cyanine7-labeled biomolecules for subsequent use in various in vivo research, and drug design related experiments.

The structure of Cyanine7 features rigidized design of central polymethyne chain. This molecular

reinforcement allows to increase quantum yield by 20% compared with parent structure, increasing fluorescence brightness.

This reagent **requires organic co-solvent** for the labeling (please see Recommended Protocols section below). Water-soluble Cyanine7 NHS ester is also available, and recommended for protein NIR labeling.