Product Data Sheet

Product Name: Cy5 azide (non-sulfonated)
Cat. No.: GC12480

Chemical Properties

Cas. No.			
Chemical Name	N-(3-azidopropyl)-6-[(2E)-3,3-dimethyl-2-[(2E,4E)-5-(1,3,3-trimethylindol-1-ium-2-yl)penta-2,4-dienylidene]indol-1-yl]hexanamide		
SMILES	CC1(C2=CC=CC=C2[N+](=C1C=CC=CC=C3C(C4=CC=CC=C4N3CCCCCC(=O)NCCCN=[N+]=[N-])(C)C)C)C		
Formula	$C_{35}H_{45}ClN_6O$	M.Wt	601.22
Solubility	≥ 60.1mg/mL in DMSO, ≥ 49.1 mg/mL in EtOH with ultrasonic	Storage	24 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 ℃ and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20℃ 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	Cy5 azide (non-sulfonated)		

Background

Cy5 azide is a labeling reagent ready for the use in Click Chemistry reaction which available as 10 mM solution in DMSO. For biomolecule labeling, the labeling reagent has low aqueous solubility, using of organic co-solvent to dissolve this molecular is necessary for efficient reaction. First, Cyanine dye should be dissolved in organic solvent and then added to a solution of biomolecule in appropriate aqueous buffer. Alkyne-modified biomolecules in mixtures of water with organic solvents can be labeled by Cy5 azide.

Cy5/BHQ2, which is widely used in the research, combinations on several TaqMan

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com
Address: 10292 Central Ave. #205, Montclair, CA, USA

probes with various degree of stability of secondary structures and provides some advice on the applicability of dye/quencher pairs for DNA dual labeled probes [1].

Reference:

[1] Farzan, V. M.; Aparin, I.O.; Veselova, O.A.; Podkolzin, A.T.; Shipulin, G.A.; Korshun, V.A.; Zatsepin, T.S. Cy5/BHQ dye-quencher pairs in fluorogenic qPCR probes: effects of charge and hydrophobicity. Analytical Methods, in press.