

Product Information

Biotin/Cy5 PEG reagent, Cy5 Biotin, Purity 95%

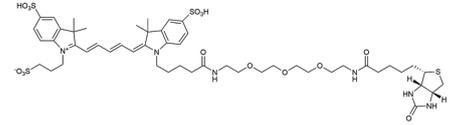
Cat. No.: X24-03-YW0567

Size: 1 mg; 5 mg

PubChem CID: 164577258

Synonym: Cy5-Biotin

This product is for research use only and is not intended for diagnostic use.



Product Information

Description	Cy5 Biotin is a water-soluble reagent that emits red fluorescence and remains pH-independent from pH 4 to pH 10.
Molecular Weight	1,137.4
Molecular Formula	C ₅₁ H ₇₂ N ₆ O ₁₅ S ₄
Functional Group 1	Biotin
Functional Group 2	Cy5
Functional Group 3	None
Reactive Group 1	Avidin
Reactive Group 2	Streptavidin
IUPAC Name	3-[2-[(1E,3E,5E)-5-[1-[5-[2-[2-[2-[2-[5-[(3aS,4R,6aR)-2-oxo-1,3,3a,4,6,6a-Hexahydrothieno[3,4-d]imidazol-4-yl]pentanoylamino]ethoxy]ethoxy]ethoxy]ethylamino]-5-oxopentyl]-3,3-dimethyl-5-sulfoindol-2-ylidene]penta-1,3-dienyl]-3,3-dimethyl-5-sulfoindol-1-ium-1-yl]propane-1-sulfonate
InChI	InChI=1S/C51H72N6O15S4/c1-50(2)38-33-36(75(64,65)66)18-20-41(38)56(44(50)14-6-5-7-15-45-51(3,4)39-34-37(76(67,68)69)19-21-42(39)57(45)25-12-32-74(61,62)63)24-11-10-17-47(59)53-23-27-71-29-31-72-30-28-70-26-22-52-46(58)16-9-8-13-43-48-40(35-73-43)54-49(60)55-48/h5-7,14-15,18-21,33-34,40,43,48H,8-13,16-17,22-32,35H2,1-4H3,(H6-,52,53,54,55,58,59,60,61,62,63,64,65,66,67,68,69)/t40-,43+,48-/m0/s1
InChI Key	FHRGIHYAKBLXKY-SGWHYLBPSA-N
Canonical SMILES	CC1(C2=C(C=CC(=C2)S(=O)(=O)O)[N+](=C1C=CC=CC=C3C(C4=C(N3CCCC(=O)NCCOCCOCCOCCNC(=O)CCCC5C6C(CS5)NC(=O)N6)C=CC(=C4)S(=O)(=O)O)(C)C)CCCS(=O)(=O)[O-])C
Isomeric SMILES	CC1(C2=C(C=CC(=C2)S(=O)(=O)O)[N+](=C1/C=C/C=C/C=C/3\C(C4=C(N3CCCC(=O)NCCOCCOCCOCCNC(=O)CCCC[C@@H]5[C@@H]6[C@H](CS5)NC(=O)N6)C=CC(=C4)S(=O)(=O)O)(C)C)CCCS(=O)(=O)[O-])C
Form	Solid

Purity	95%
Solubility	Water, DMSO, DMF, MeOH
Identity	Confirmed by NMR.
Applications	Cy5 Biotin is used for detecting and quantifying biotin binding sites on avidin, streptavidin, or neutravidin, with a PEG3 spacer minimizing steric hindrance during binding.
Storage	Store at -20°C.
