

MG-D-11P-NH2 info

Molecular Biosensors and Imaging Center
Carnegie Mellon University
A Technology Center for Networks and Pathways

Physical Properties		Chemical Structure	
Formula Weight	1145 g/mol		
Chemical Formula	C ₅₄ H ₈₇ N ₄ O ₁₅ •C ₂ F ₃ O ₂		
Solubility	>10 mg/mL in Water, Methanol		
Storage	2-8 ⁰ C in dark		
Spectral Properties		Excitation/Emission Spectra	
Extinction Coeff.	74,250 M ⁻¹ cm ⁻¹ (607 nm)		
Ex/Em Maxima	MG-1 (H6) Bound 635/656 nm MG-13 (HL4) Bound 629/649 nm MG-16 (L5) Bound 640/668 nm		
Quantum Yield	Free <0.000015 Bound MG1 (H6): 0.25 MG13 (HL4) 0.16 MG16 (L5): 0.05		
Fold Enhancement	MG1 (H6): 18000 MG13 (HL4): 15700 MG16 (L5): 4100		
Biochemical Properties			
mol Dye / mol scFv	TBD		
Affinity (Cell Surface)	MG-1: 7.5 nM	MG-13: ~3.2 nM	MG-16: ~1.2 nM
This dye is cell impermeant and will label scFv modules expressed at the cell surface only. We have seen weak fluorescence in permeabilized yeast cells at 100 nM concentrations.			
For more information			
Marcel Bruchez (TCNP Program Manager) Tel: 412 268 9661 email: bruchez@cmu.edu		Alan Waggoner (TCNP Director) waggoner@andrew.cmu.edu	