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Product Information

TO3-PEG3-Biotin RNA Probe

Cat. No.	Unit Size	Concentration
C441	100 µL	250 µM

Storage upon receipt:
- -20°C
- Protect from light

Ex/Em: 628/648 nm

Product Description

TO3-PEG3-Biotin is a unique fluorogenic RNA probe. TO3-PEG3-Biotin forms a specific tight binding with the RNA Mango I Aptamer ($K_D \approx 5$ nM), and results in strong fluorescence enhancement (~35X) when bound to the Mango I apatmer. This unique feature makes TO3-PEG3-Biotin as useful probe in RNA tracking and visulization. This probe is provided as 250 µM solution in DMSO.

Feature:

- Permeability to cell plasma and nuclear membranes.
- Low toxicity to cells.
- High molar absorptivity, with extinction coefficients >65,000 cm^{-1} M^{-1} at visible absorption maxima.
- Extremely low intrinsic fluorescence, with quantum yields typically <0.01 when unbound.
- Quantum yield increases to 0.1 when bound to Mango I Aptamer.

Specifications:	
Excitation/Emission:	628/648 nm
Shipping Condition:	Ambient
Storage Conditions:	-20ºC, protect from light
Molecular Formula:	$C_{46}H_{62}N_6O_8S_2$
Molecular Weight:	891.16
Concentration:	250 µM in DMSO

Application:	Recommended Final Concentration of Probe
In Vivo Cellular Imaging	100 nM – 200 nM
In Vitro Fluorescence Assays	100 nM – 200 nM
In Vitro Transcription (IVT)	50 nM – 200 nM
FRET Assay	50 nM – 200 nM