

AF 488 dUTP

http://www.lumiprobe.com/p/af-488-dutp

AF 488 dUTP is a nucleotide labeled with the fluorescent dye AF 488, used to synthesize labeled DNA probes. Nucleotides can be incorporated into nucleic acid using standard molecular biology techniques such as nick translation, random primer labeling, reverse transcription, PCR, and end-labeling with terminal deoxynucleotidyl transferase. Labeled DNA probes can be used for techniques such as FISH, microarrays, and blotting.

AF 488 is a fluorescent dye that is insensitive to pH in the range from 4 to 10. AF 488 has absorption maxima at 495 nm and emission maxima at 519 nm, which corresponds to the green region of the spectrum.



Structure of AF 488 dUTP

Absorption and emission spectra of AF 488

General properties	
Appearance:	orange solid
Molecular weight:	1177.59
Molecular formula:	$C_{39}H_{40}Li_4N_6O_{25}P_3S_2$ -
Solubility:	water
Quality control:	NMR ¹ H and HPLC-MS (95+%)
Storage conditions:	24 months after receival at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate. Avoid prolonged exposure to light.
Legal statement:	This Product is offered and sold for research purposes only. It has not been tested for safety and efficacy in food, drug, medical device, cosmetic, commercial or any other use. Supply does not express or imply authorization to use for any other purpose, including, without limitation, in vitro diagnostic purposes, in the manufacture of food or pharmaceutical products, in medical devices or in cosmetic products.

Spectral properties

Excitation/absorption maximum, nm:	495
ε, L·mol ⁻¹ ·cm ⁻¹ :	71800
Emission maximum, nm:	519
Fluorescence quantum yield:	0.91
CF ₂₆₀ :	0.16
CF ₂₈₀ :	0.10