Fluorescence Quantum Yield Standards

The most frequently used method of determining the quantum yield of a fluorophore is by comparison with a standard of known quantum yield. The table of quantum yield standards lists dyes that are frequently used as standards in such relative quantum yield measurements.

Quantum Yield [Q.Y.] Standards	Q.Y.[%]	Conditions for Q.Y. Measurement	Excitation [nm]	Ref.
Cy3	4	PBS	540	1
Cy5	27	PBS	620	1
Cresyl Violet	53	Methanol	580	2
Fluorescein	95	0.1 M NaOH, 22℃	496	2
POPOP	97	Cyclohexane	300	2
Quinine Sulfate	58	0.1 M H_2SO_4, 22℃	350	2
Rhodamine 101	100	Ethanol	450	3
Rhodamine 6G	95	Water	488	3
Rhodamine B	31	Water	514	3
Tryptophan	13	Water, 20℃	280	2
L-Tyrosine	14	Water	275	2

PBS = phosphate-buffered saline

POPOP = 1, 4-bis(5-phenyloxazole-2-yl)benzene

References

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