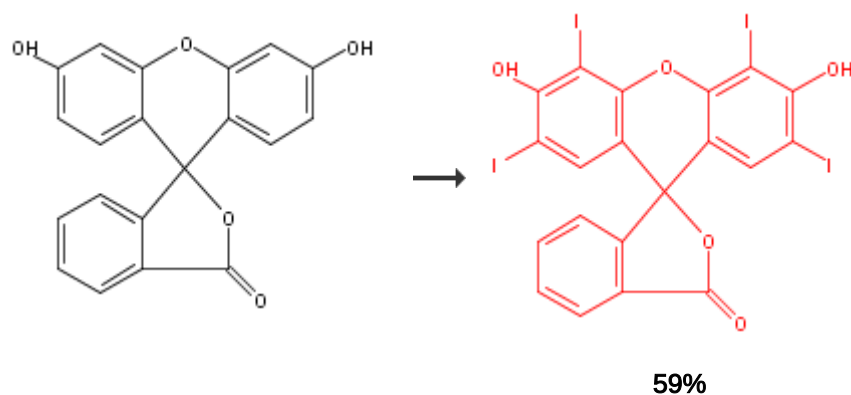


1. Single Step[Overview](#)**Steps/Stages**

1.1 R:HIO₃, R:I₂, S:H₂O, S:EtOH, rt; 2 h, rt; 1 h, 60°C

Notes

regioselective, Reactants: 1, Reagents: 2, Solvents: 2, Steps: 1, Stages: 1, Most stages in any one step: 1

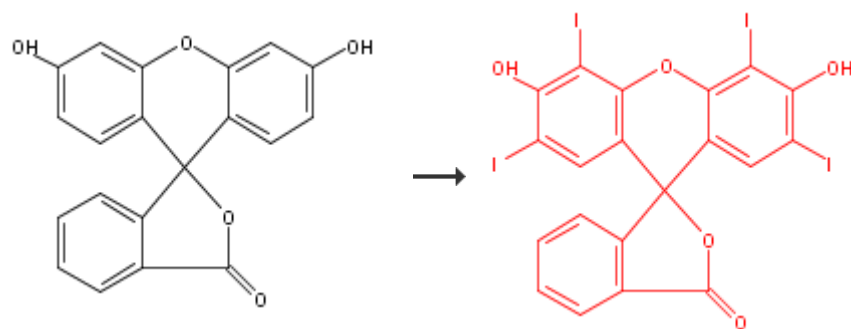
References

[Rose Bengal analogs and vesicular glutamate transporters \(VGLUTs\)](#)

By Pietrancosta, Nicolas et al

From Bioorganic & Medicinal Chemistry, 18(18), 6922-6933; 2010

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2. Single Step[Overview](#)**Steps/Stages**

1.1

Notes

Reactants: 1, Steps: 1, Stages: 1, Most stages in any one step: 1

References

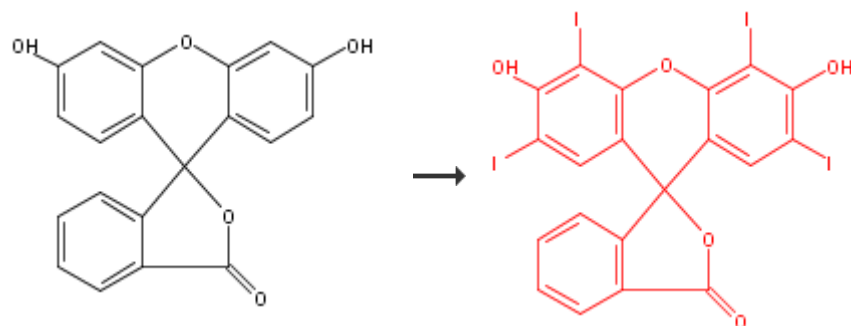
[Electrochemical preparation of erythrosine and eosine](#)

By Jagannathan, E. and Anantharaman, P. N.

From Bulletin of Electrochemistry, 3(1), 29-31; 1987

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3. Single Step



Overview

Steps/Stages

1.1 S:CHCl₃

Notes

Classification: Regioselective; Iodination; #
Conditions: I2 (I-131); CHCl₃; pH 7,
Reactants: 1, Solvents: 1, Steps: 1, Stages: 1,
Most stages in any one step: 1

References

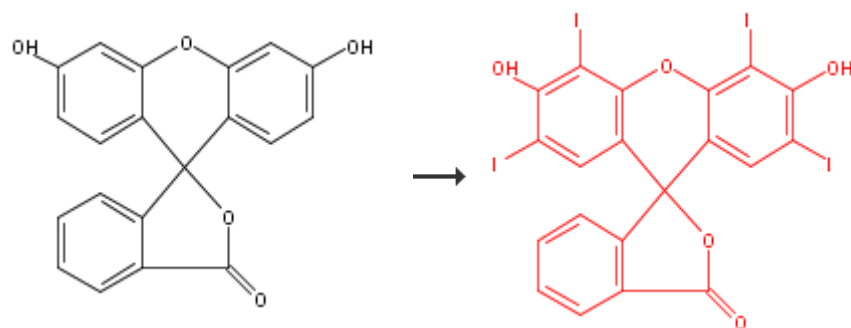
[Preparation of diiodofluorescein-I131](#)

By Vigne, J. and Fondarai, J.

From Bulletin de la Societe Chimique de France, , 331-2; 1953

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4. Single Step



Overview

Steps/Stages

Notes

1.1 R:I₂, S:H₂O

Classification: Regioselective; Iodination; #
Conditions: I2 borax; H2O, Reactants: 1,
Reagents: 1, Solvents: 1, Steps: 1, Stages: 1,
Most stages in any one step: 1

References

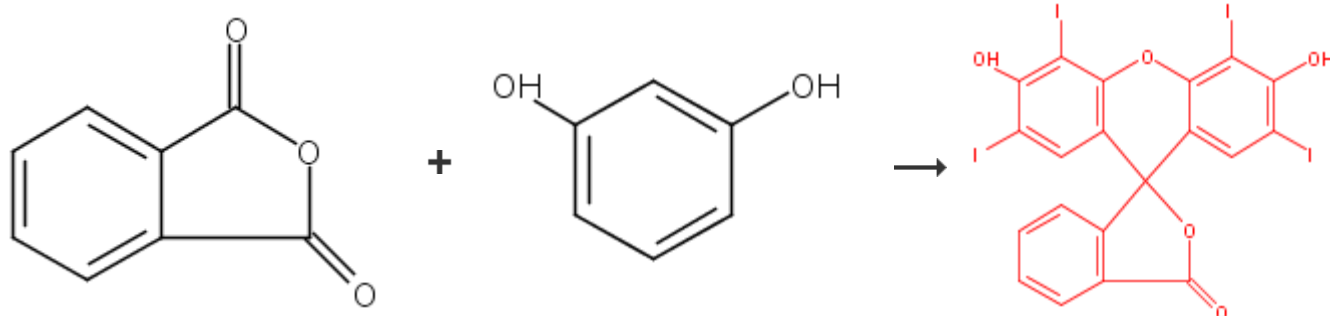
[Action of iodine on phenolphthalein](#)

By Classen, Alex and Loeb, Walther

From Berichte der Deutschen Chemischen
Gesellschaft, 28, 1603-1611; 1895

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5. 2 Steps



Overview

Steps/Stages

- 1.1 C:ZnCl₂, 30 min, 190°C
- 1.2 S:MeOH, 190°C → rt
- 2.1 R:HIO₃, R:I₂, S:H₂O, S:EtOH, rt; 2 h, rt; 1 h, 60°C

Notes

1) Friedel-Crafts reaction, no solvent (stage 1), solid state (stage 1), ultrasound (stage 2), 2) regioselective, Reactants: 2, Reagents: 2, Catalysts: 1, Solvents: 3, Steps: 2, Stages: 3, Most stages in any one step: 2

References

[Rose Bengal analogs and vesicular glutamate transporters \(VGLUTs\)](#)

By Pietrancosta, Nicolas et al

From Bioorganic & Medicinal Chemistry, 18(18), 6922-6933; 2010

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6. Single Step



Notes

1.1 R:Mn (salts), S:H₂O, rt

excess tetraiodofluorescein used, Reactants: 2, Reagents: 1, Solvents: 1, Steps: 1, Stages: 1, Most stages in any one step: 1

References

[Spectrophotometric study of some Mn\(II\) ternary complexes and their analytical applications](#)

By El-Khatib, Rafat Mohamad and Nassr, Lobna Abdel-Mohsen Ebaid

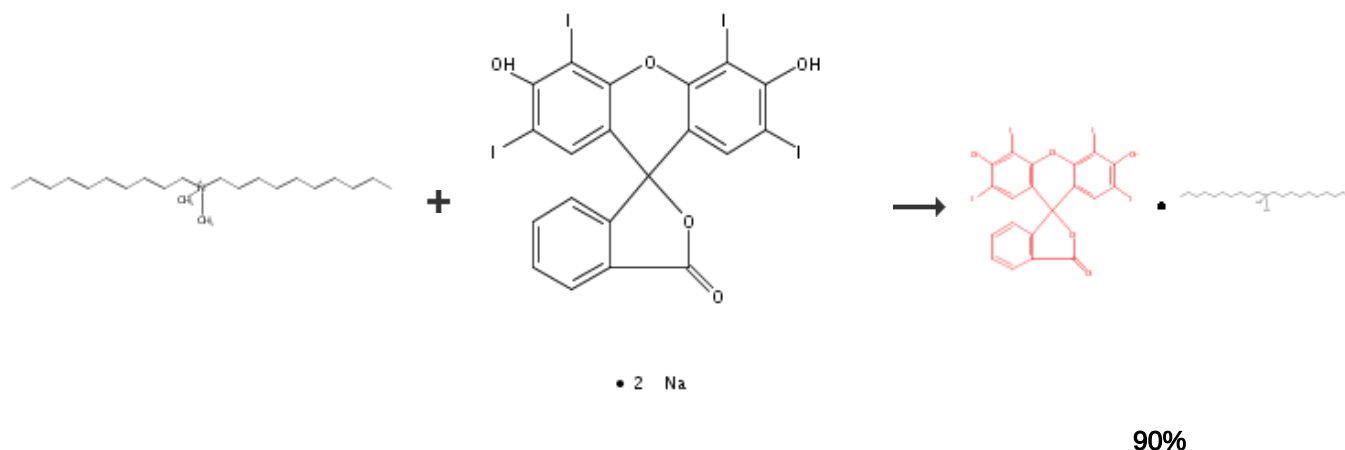
From Monatshefte fuer Chemie, 140(10), 1139-1142; 2009

Experimental Procedure

Mn(II) reacts in aqueous medium with pyridine (py), 2,2'-bipyridine (bipy), and 2,2':6',2''-terpyridine (terpy) as primary ligand and fluorescein derivatives as secondary ligand to form pale red {(Mn-py-L₂)} to deep red {(Mn-terpy-L₂)} ternary complexes. The secondary ligands studied, L₂, are fluorescein, (FICOOH) and 2',4',5',7'-tetraiodofluorescein (I₄FICOOH). Complex [Mn(py)₂(I₄FICOO)]⁺. $\lambda_{\max}$: 560 nm, ϵ : 1,200 dm³ mol⁻¹ cm⁻¹.

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8. Single Step



Overview

Steps/Stages

1.1 S:H₂O, 5 h, 80°C

Notes

Reactants: 2, Solvents: 1, Steps: 1, Stages: 1, Most stages in any one step: 1

References

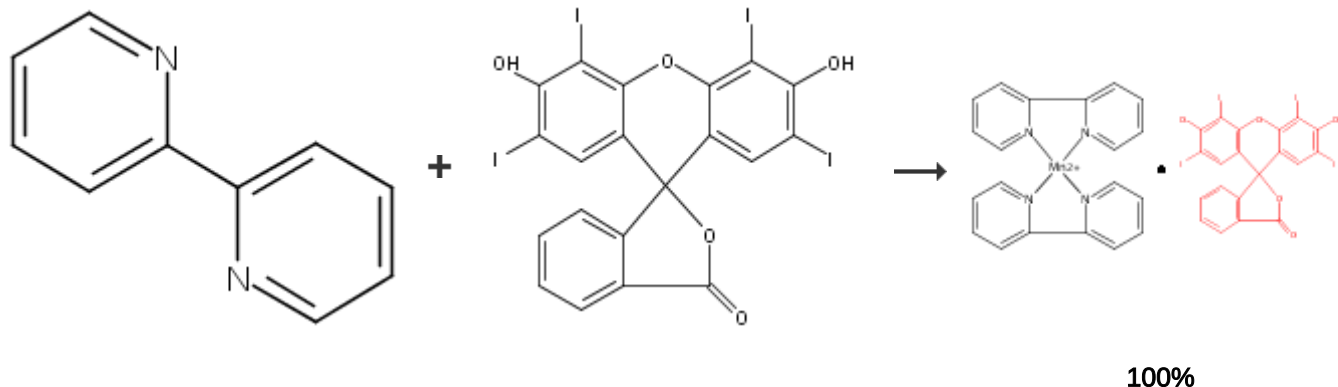
[Long alkyl chain bis-quaternary ammonium-based ionic liquids as biologically active xanthenes dyes](#)

By Pernak, Juliusz et al

From Journal of the Brazilian Chemical Society, 20(5), 839-845; 2009

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9. Single Step



Overview

Steps/Stages

1.1 R:Mn (salts), S:H₂O, rt

Notes

excess tetraiodofluorescein used, Reactants: 2, Reagents: 1, Solvents: 1, Steps: 1, Stages: 1, Most stages in any one step: 1

References

[Spectrophotometric study of some Mn\(II\) ternary complexes and their analytical applications](#)

By El-Khatib, Rafat Mohamad and Nassr, Lobna Abdel-Mohsen Ebaid

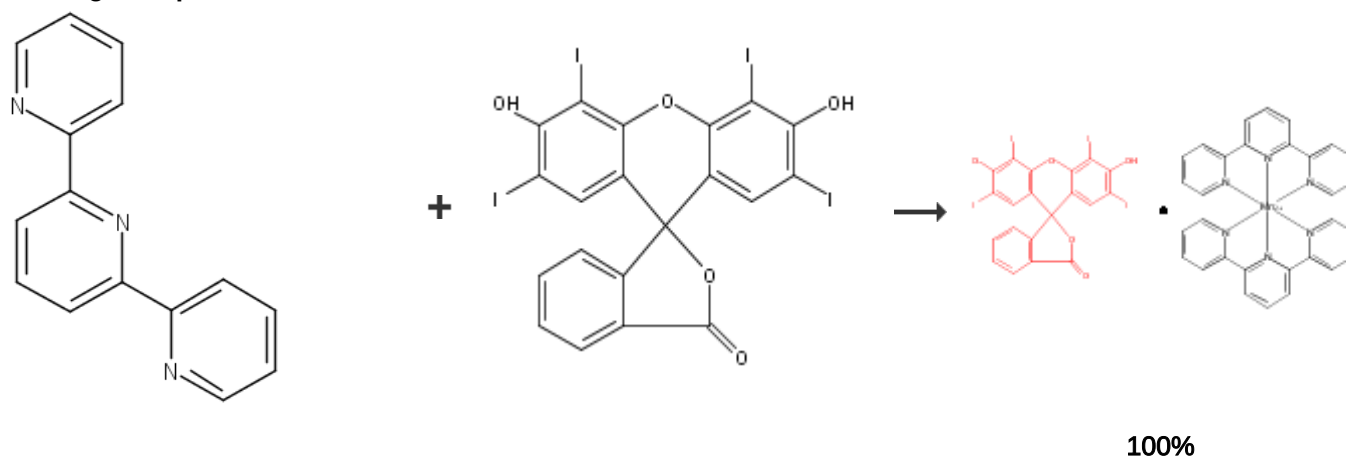
From Monatshefte fuer Chemie, 140(10), 1139-1142; 2009

Experimental Procedure

General/Typical Procedure: Mn(II) reacts in aqueous medium with pyridine (py), 2,2'-bipyridine (bipy), and 2,2':6',2''-terpyridine (terpy) as primary ligand and fluorescein derivatives as secondary ligand to form pale red {(Mn-py-L₂)} to deep red {(Mn-terpy-L₂)} ternary complexes. The secondary ligands studied, L₂, are fluorescein, (FICOOH) and 2',4',5',7'-tetraiodofluorescein (I₄FICOOH). Complex [Mn(bipy)₂(I₄FICOO)]⁺. λ_{max} : 563 nm, ϵ : 2,600 dm³ mol⁻¹ cm⁻¹.

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10. Single Step



Overview

Steps/Stages

Notes

1.1 R:Mn (salts), S:H₂O, rt

excess tetraiodofluorescein used, Reactants: 2, Reagents: 1, Solvents: 1, Steps: 1, Stages: 1, Most stages in any one step: 1

References

[Spectrophotometric study of some Mn\(II\) ternary complexes and their analytical applications](#)

By El-Khatib, Rafat Mohamad and Nassr, Lobna Abdel-Mohsen Ebaid

From Monatshefte fuer Chemie, 140(10), 1139-1142; 2009

Experimental Procedure

General/Typical Procedure: Mn(II) reacts in aqueous medium with pyridine (py), 2,2'-bipyridine (bipy), and 2,2':6',2''-terpyridine (terpy) as primary ligand and fluorescein derivatives as secondary ligand to form pale red {(Mn-py-L₂)} to deep red {(Mn-terpy-L₂)} ternary complexes. The secondary ligands studied, L₂, are fluorescein, (FICOOH) and 2',4',5',7'-tetraiodofluorescein (I₄FICOOH). Complex [Mn(terpy)₂(I₄FICOO)]⁺. λ_{max} : 566 nm, ϵ : 15,000 dm³ mol⁻¹ cm⁻¹.

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