



Certificate of Analysis

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Product Name: Rhobo6 ECM Dye Catalog No.: 8876 Batch No.: 1

IUPAC Name: (E)-2-(6-((2-Boronobenzyl)amino)-3-((2-boronobenzyl)iminio)-3H-xanthen-9-yl)-4-carboxybenzoate trifluoroacetate

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₃₅H₂₈B₂N₂O₉.CF₃CO₂H

Batch Molecular Weight: 756.26 **Physical Appearance:** Red solid

Solubility: DMSO to 10 mM Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 91.2% purity at 531 nm

¹H NMR:Consistent with structureMass Spectrum:Consistent with structureUV Spectrum:Consistent with structure

 λ_{max} : 520 nm (Phosphate Buffered Saline) λ_{ex} : 521 nm (Phosphate Buffered Saline) λ_{em} : 546 nm (Phosphate Buffered Saline)

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use



Product Information

Print Date: Dec 15th 2025

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Description:

Key information: Rhobo6 ECM Dye is a cell-impermeable fluorescent probe for labeling the extracellular matrix (ECM) in live tissues. It contains a phenylboronic acid group that binds reversibly to diols commonly found in ECM glycans resulting in a significant increase in fluorescence and a red shift in emission spectra. For optimal signal, we recommend using 561 nm excitation and a 575 nm long-pass emission filter. Rhobo6 staining is not compatible with samples that are chemically fixed or that otherwise exhibit compromised cellular membranes. Used for: labeling the ECM in live tissues. Application: fluorescent microscopy including 2P and... Please see product specific page on www.tocris.com for full description.

Physical and Chemical Properties:

Batch Molecular Formula: C₃₅H₂₈B₂N₂O₉.CF₃CO₂H

Batch Molecular Weight: 756.26 Physical Appearance: Red solid

Minimum Purity: ≥90%

Batch Molecular Structure:

Storage: Store at -20°C

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

Solubility & Usage Info:

DMSO to 10 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

Licensing Information:

Sold under license from the Howard Hughes Medical Institute, Janelia Research Campus

References:

Fiore et al (2025) Live imaging of the extracellular matrix with a glycan-binding fluorophore. Nat.Methods 22 1070. PMID: 39915692.

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