

Product Name: SALAD1

Catalog No.: 8974

Batch No.: 1

IUPAC Name: (E)-3-(2-((2-Fluoro-6-(1H-pyrazol-1-yl)benzyl)amino)-2-oxoethyl)-2-((1-methylquinolin-4(1H)-ylidene)methyl)benzo[d]thiazol-3-ium trifluoroacetate

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₃₀H₂₅FN₅OS.C₂F₃O₂

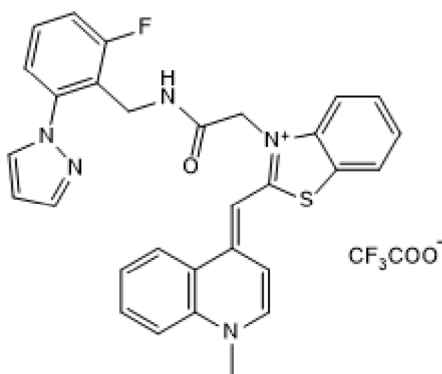
Batch Molecular Weight: 635.64

Physical Appearance: Orange solid

Solubility: DMSO to 10 mM

Storage: Store at -20°C

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 98.7% purity at 498 nm

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

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

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Description:

Key information: SALAD1 is a specific and high-affinity aptamer-ligand for aptamer Mango II ($K_{Dapp} = 0.69$ nM). Green fluorogenic dye displaying 3.5-fold brighter fluorescence than other Mango aptamer dyes such as TO1-biotin. Binds 7.5-fold more tightly to Mango II compared to TO dye. SALAD1 exhibits a binding preference to its target RNA (Mango II) over the other three Mango aptamers (7-, 20- and 16-fold tighter than Mango I, III and IV). The improved brightness and tighter binding of SALAD1 to Mango aptamers allow detection and tracking of RNA with greater sensitivity and spatial resolution, facilitating studies of RNA localization, dynamic... Please see product specific page on www.tocris.com for full description.

Physical and Chemical Properties:

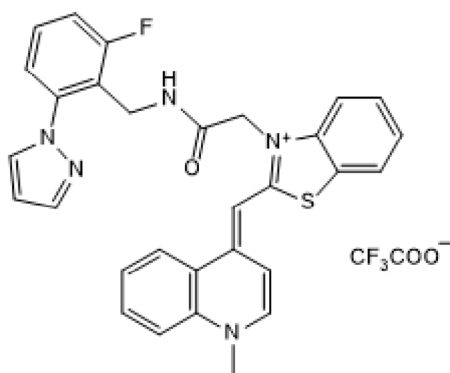
Batch Molecular Formula: $C_{30}H_{25}FN_5OS \cdot C_2F_3O_2$

Batch Molecular Weight: 635.64

Physical Appearance: Orange solid

Minimum Purity: $\geq 95\%$

Batch Molecular Structure:



References:

Yang *et al* (2025) Structure-informed design of an ultrabright RNA-activated fluorophore. *Nat.Chem.* **17** 1188. PMID: 40437193.

Storage: Store at $-20^\circ C$

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 $45-60^\circ C$ 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 $-20^\circ C$ or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

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