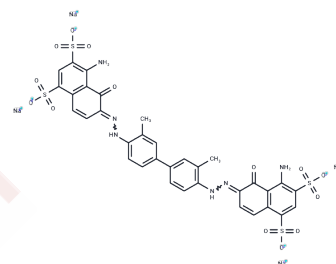


Evans blue

Chemical Properties

CAS No. :	314-13-6
Formula:	C ₃₄ H ₂₄ N ₆ Na ₄ O ₁₄ S ₄
Molecular Weight:	960.78
Appearance:	no data available
Storage:	keep away from direct sunlight Powder: -20°C for 3 years In solvent: -80°C for 1 year



Biological Description

Description	Evans blue (C.I. 23860) is an azo dye, inhibits L-glutamate uptake via the membrane-bound excitatory amino acid transporter (EAAT).
Targets(IC50)	GluR
In vitro	Evans Blue is found to be inhibiting DNA binding of NF-κB at a low concentration of 100 μM[1]. It has proven over the years to be a dependable stain for microscopic determination of cell death[2]. Evans Blue is also a known blocker of a subset of α-amino-3-hydroxy-5-methyl-isoxazole/kainate receptors (IC50=355 nM) for the subunit combination GluR1,2[5]. Evans blue is the first known δ-subunit-specific antagonist of ENaC and activates large-conductance Ca ²⁺ -activated K ⁺ channels in sheep bladder myocytes and cultured endothelial cells of human umbilical veins[5].
In vivo	Evans blue pretreatment could inhibit the mast cells degranulation and that may be the main mechanism for prevent animals from C48/80-triggered anaphylaxis and systemic inflammation[4]. Evans blue modulates the non-N-methyl-D-aspartate receptor in rat thalamic neurons, blocks the P2X-purinergic receptor in rat vas deferens, and inhibits the glutamate transporter in rat brain synaptic vesicles[6].

Solubility Information

Solubility	H ₂ O: 104.1 mM, Sonication is recommended. PBS: 100 mg/mL (104.08 mM), Solution. DMSO: 104.1 mM, Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.0408 mL	5.2041 mL	10.4082 mL
5 mM	0.2082 mL	1.0408 mL	2.0816 mL
10 mM	0.1041 mL	0.5204 mL	1.0408 mL
50 mM	0.0208 mL	0.1041 mL	0.2082 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

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Roseth S, et al. Biochem Pharmacol. 1998, 56(9):1243-9.

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