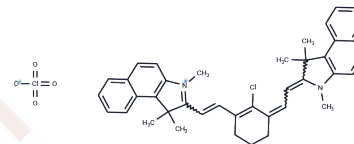


## IR 813 perchlorate

## Chemical Properties

CAS No. :	201024-57-9
Formula:	C <sub>40</sub> H <sub>40</sub> Cl <sub>2</sub> N <sub>2</sub> O <sub>4</sub>
Molecular Weight:	683.66
Storage:	Powder: -20°C for 3 years   In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



## Biological Description

Description	IR 813 perchlorate, a near-infrared (NIR) fluorescent dye (Ex=815 nm, Em=840 nm), is utilized for visualizing regional lymph nodes in mice [1].
Targets(IC50)	Others
In vitro	IR 813 causes 31.4% hemolysis in red blood cells when applied at 17.3 μM for 2 hours, and induces 50% cell death in MRC-5 cells at 5.9 μM over 24 hours [1].
In vivo	IR 813 perchlorate exhibits peak fluorescence intensity at 4 hours post-injection, accompanied by swift extravasation, when used to visualize regional lymph nodes in mice [1]. Ten-week-old female Balb/cOlaAnN mice are kept under a 12-hour light/dark cycle to minimize tissue autofluorescence in the NIR region, with free access to food and water. A single 5.1 nmol dose of IR 813 dye (20 μL of 0.173 mg/mL in a PEG-400/ethanol/water=3:2:5 solution) is injected subcutaneously into the right anterior paw. In vivo optical imaging is performed using the Fluobeam700 NIR system (739 nm excitation light at 3.5 mW, 750 nm long-pass emission cutoff filter) to record fluorescence intensity in the axillary lymph node (ALN) over a week (at 5 min, 1 h, 4 h, 24 h, and 7 days). Semiquantitative data are obtained from fluorescence images using ImageJ 1.44 software. [Following is our recommended protocol. This protocol only provides a guideline and should be modified according to your specific needs] [1].

### Preparing Stock Solutions

---

	<b>1mg</b>	<b>5mg</b>	<b>10mg</b>
1 mM	1.4627 mL	7.3136 mL	14.6272 mL
5 mM	0.2925 mL	1.4627 mL	2.9254 mL
10 mM	0.1463 mL	0.7314 mL	1.4627 mL
50 mM	0.0293 mL	0.1463 mL	0.2925 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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481