



www.nanolight.com

Instructions for CAT#399 NanoFuel®- Solvent

NanoFuel Solvent is NanoLight's solution to the problem associated with the solubility of Coelenterazine and the many new Coelenterazine analogs that have been made available in recent years.

It is not designed for IN VIVO live animal imaging use, please use "Fuel-Inject" solvent and sterile luciferins for live animal imaging.

Most of NanoLight's products now come as pre-dried films containing 0.5 mg (500 µg) of luciferin lyophilized and argonized in plastic conical bottom tubes with O-ring sealed lids.

Adding 100 µl to 200 µl of NanoFuel-Solvent (equilibrated to room temperature) to a 0.5 mg tube containing Coelenterazine or analog, vortexing for a 20-30 seconds, then shake down or spin down for a few seconds should be enough to get your luciferin into a solution suitable for use, (most people usually use this as their "stock-solution" and it will contain as high as 5 mgs/ml to 1mg per ml based on your dilution and amount of luciferin used).

This "stock-solution" is then added to buffer of choice for use in your experiments.

A few tips about Coelenterazine luciferins:

1. Dissolved Coelenterazine in NanoFuel®- Solvent can be stored for several weeks at -20°C without reduction in activity. For long term storage (up to a year) we recommend storing at -80°C.
2. When making aqueous solutions, allow them to stand at room temperature for 10 minutes to stabilize. (Dissolved oxygen in the buffer solution is being consumed by the luciferin during this period.)
3. Undiluted "Stock Solution" is generally stable for a few days at room temperature, avoid light, and keep in tightly closed vials, however once added to aqueous solutions the stability will decline and the activity will be significantly reduced.
4. The more hydrophobic Coelenterazines, such as Coelenterazine 400a might take some extra time to dissolve completely.
5. Inspection for clear solutions is wise; experiment to experiment results will vary widely and be confusing to interpret if precipitates form usually due to pH and buffer compositions.