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Instructions for CAT#397 NanoFuel®-400a Solvent

NanoFuel-400a Solvent is NanoLight's solution to the problem associated with the solubility of Coelenterazine-400a.

It is <u>not designed for *IN VIVO*</u> 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 μ g) or 5 mgs of luciferin lyophilized.

For a 2.5 mg/ml concentration of CTZ 400a add 2 ml of NanoFuel-400a Solvent (equilibrated to room temperature) to 5 mgs of CTZ 400a, vortex for a 1 minute, then aliquot into convenient sizes.

Most researchers will create a "stock-solution" of 1 mg/ml to be further diluted to a 50 to 100 μ M working solution in a buffer of your choice.

A few tips about Coelenterazine luciferins:

- Dissolved Coelenterazine 400a in NanoFuel®-400a 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. Coelenterazine 400a is a very hydrophobic molecule and might take some extra time to dissolve completely in higher concentration.
- 5. Always prepare fresh working solutions to avoid experiment to experiment variations.