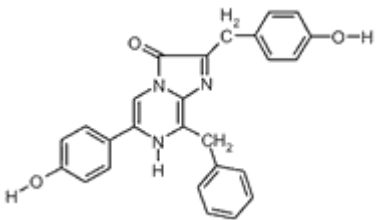
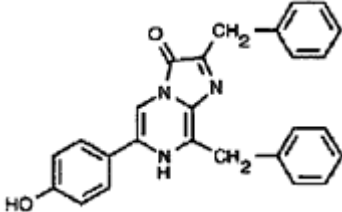


Coelenterazine Sterile Injection Vials for animal *in-vivo* imaging

Improved the luciferase signal with highly pure Coelenterazine in sterile injection vials and optimized diluent for *in vivo* research

Product Information

Product name cat.number	MW (g·mol ⁻¹)	λ_{em} max. (nm)	
Injectable Native Coelenterazine FP-BV0731, 500 µg FP-BV0733, 10 x 500 µg	423.47	465	
Injectable Benzyl-Coelenterazine (Coelenterazine H) FP-BV0681, 500 µg FP-BV0683, 10 x 500 µg	407.48	464	

Storage: -80°C (>1 year)

Protect from light and moisture

Sterile injection vial for animal in-vivo imaging use only - LIMITATIONS:
THIS PRODUCT IS NOT INTENDED FOR HUMAN CONSUMPTION OR FOR
USE IN HUMAN DIAGNOSTICS

Introduction

Bioluminescence is generation of light by a biochemical reaction involving oxidation of a substrate via an enzyme. This phenomenon has been used extensively in different formats for life science research and drug discovery owing to its extremely high sensitivity, replacing advantageously hazardous methods as radio-element.

Background: Highly pure Coelenterazine and its analogs form crystalline structures that make them extremely difficult to dissolve, using physiological less toxic solvents.

Our empirically designed solvent is able to dissolve extremely pure (99%+) Coelenterazine, h-Coelenterazine, Coelenterazine-F, and our other specially packaged, sterile Coelenterazine analogs, in a relatively safe and effective injectable solution.

All injectable products contain 0.5 milligram amount of substrate freeze-dried on an inner glass vial as a thin film lining for easier dissolution. For longer shelf-live all injectable vials

FT-BV0731

are packed under Argon to prevent oxidation. Store vials at -80°C upon arrival and let them get to room temperature before use.

Our special injection-vials have a low retention volume with a 300 μl maximal volume capacity. You may unscrew the top if desired for access using larger needles.

Directions for use

1. Using any 0.5 to 1.0 ml syringe equipped with a 23 or smaller gauge needle, draw up 150 μl of warm ($20\text{-}40^{\circ}\text{C}$) Sterile Injectable Diluent.
2. Inject 150 μl of Sterile Injectable Diluent into the substrate vial. Aspirate up and down using the needle and syringe or vortex briefly, observe for a completely clear solution, if the solution is not completely clear, warm the vial under hot water or in a heating block at 60°C for few minutes and inspect for complete clarity.
3. Draw up 15 to 75 μl (see table below) of dissolved substrate (3.33 mg/ml) with Insulin syringe (e.g. BD cat. # 328430) syringe for injection into the peritoneal cavity. Inspect for, and remove any air bubbles in the syringe and flush the needle. The advantage of using Insulin syringes is their very low ($<2\mu\text{l}$) holdup volume! Inject slowly.

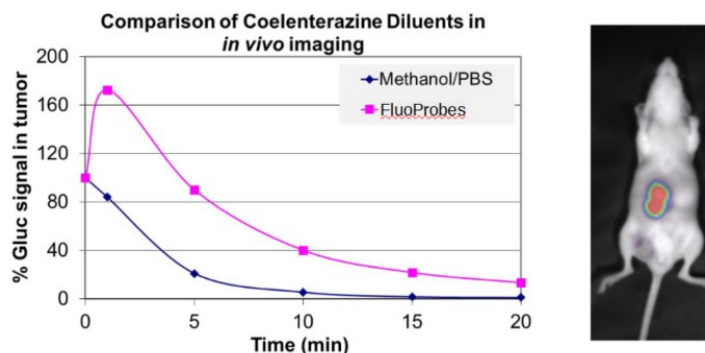
We recommend using the following amounts of your 3.33 mg/ml substrate solution for injecting a mouse (25 gram body weight):

<u>Desired Substrate Amount</u>	<u>Injection Volume</u>
50 μg	15 μl
100 μg	30 μl
200 μg	60 μl
250 μg	75 μl

Other Information: the diluent was designed to maximize the concentration of Coelenterazine and minimize volume injected for all our currently available Coelenterazines.

Bio-distribution: injectable substrate was tested in mouse tail vein injection but will also work for intra peritoneal injections. In comparison to conventional Methanol/PBS dissolved CTZ, our injectable substrate will improve your in vivo imaging results.

Data presented below was kindly provided by Dr. Bakhos Tannous :



FT-BV0731

Gaussia Luciferase is many times brighter than other luciferases, (has a much higher Km), you will have to use more Coelenterazine to appreciate its potential; (native Coelenterazine is the only substrate that will work with Gaussia Luciferase). We recommend using 100-200 µg in a 25 gram mouse, more for higher signal. **Do not use more than 70-80 µl injectable substrate per 25 gram mouse.** Raise the concentration of the Coelenterazine solution for injection of higher substrate amounts.

Related products

- D-Luciferin, free acid, [FP-27060D](#)
- D-Luciferin, K⁺ salt, [FP-M1224D](#)
- [Coelenterazines R&D grade](#)

Ordering information

Catalog size quantities and prices may be found at <http://www.fluoprobes.com>
Please inquire for higher quantities (availability, shipment conditions).

For any information, please ask : FluoProbes® / Interchim; Hotline : +33(0)4 70 03 73 06

Disclaimer : Materials from FluoProbes® are sold **for research use only**, and are not intended for food, drug, household, or cosmetic use.
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