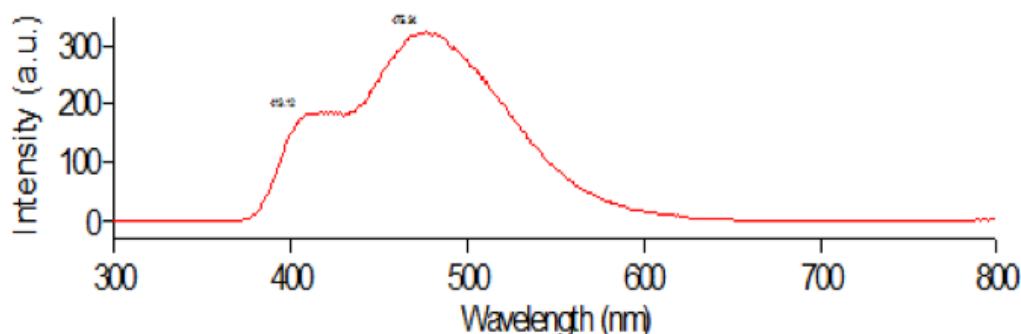


Cat.# 346      e Coelenterazine F      MW 451.5

**General Notes:** e Coelenterazine F (eCTZF) is a new synthetic Coelenterazine analogue with an additional ethyl group forming an additional ring system. In addition a Fluoride replace the hydroxyl group on the phenol ring.

These changes in the structure result in unique properties in the emission spectrum and luminescent kinetics as displayed below.

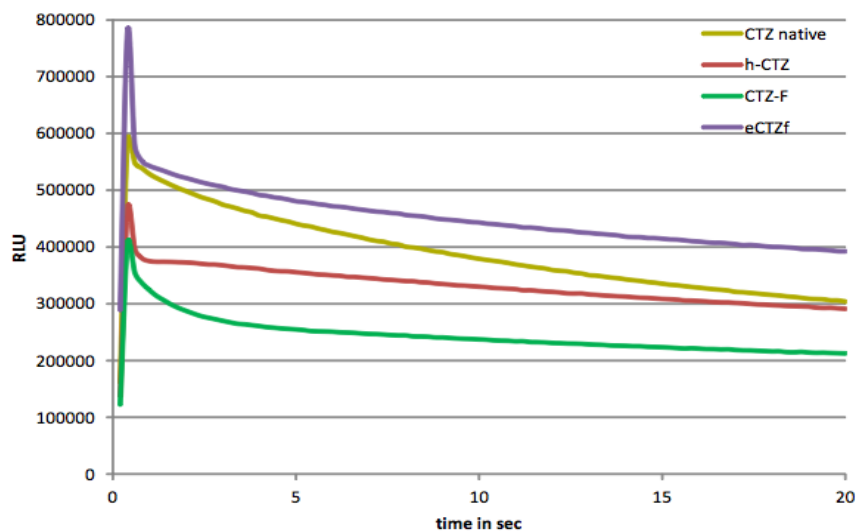
**Emission Spectrum of Cat# 346 eCTZF in combination with Renilla muelleri luciferase (RmLuc)**



RmLuc + eCTZF (max at 413 and 475 nm)

**Luminescent Kinetic of Cat# 346 eCTZF in combination with Renilla muelleri luciferase (RmLuc) showing higher initial output and prolonged glow kinetic compared to h-CTZ, CTZ-F and native CTZ**

**comparison of kinetics (29.1ng RmLuc)**



## Manual for eCoelenterazine-F

**Storage and Shelf-Life:** It is best stored as completely dry powder under Argon in air-tight O-ring plastic tubes at -20°C or for longer storage at -80°C, protected from light. Oxygen and moisture will lead to auto-oxidation of CTZ over time, reducing its overall activity.

**Dissolving eCTZF:** It is always best to make FRESH “SOLUBILIZED” SOLUTIONS immediately before luminescent assays or experiments.

1. Dissolve lyophilized eCTZ-F in NanoSolvent (Cat. #399) or alternatively in acidified, degassed ethanol as a 1 mg/ml solution
2. Use this stock solution to make an aqueous solution. 451.5 ul of a 1mg/ml stock solution diluted in 10 ml of buffer will result in a 100µM solution which is optimal for luminometer assays.
3. Store NanoSolvent dissolved eCTZ-F at -80°C, do not store the aqueous working solution (will degrade by oxidation).