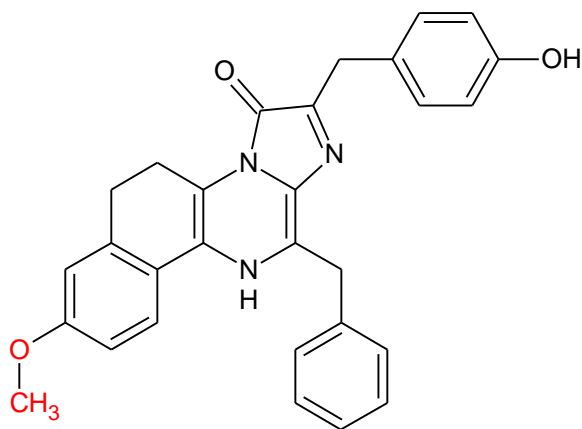


HOW TO USE “Prolume Purple”

Cat. #369 methoxy e-COELENTERAZINE patent pending MW 463.53



General Notes: Methoxy e-Coelenterazine (Me-O-e-CTZ) called “**Prolume Purple**” is a new synthetic analogue of e-Coelenterazine with an additional **methoxy group**. This compound was developed by Nanolight™ Technology to work with **Renilla Luciferase (RLuc)** and **Renilla Luciferase 8 (RLuc8)** to emit light at **~405 nm**.

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 -70°C, protected from light.

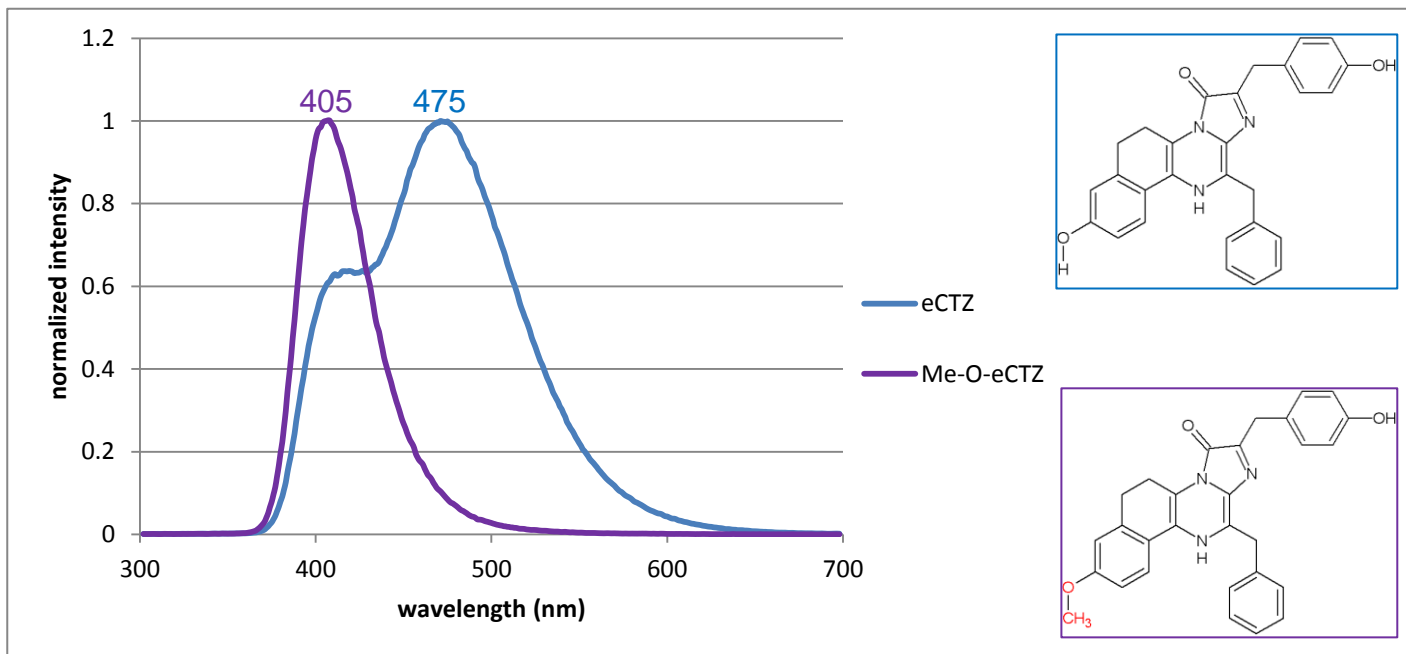
Usage: It is always best to make FRESH SOLUTIONS immediately before luminometer assays or experiments.

1. Dissolve lyophilized **Prolume Purple** in **NanoFuel Solvent** as a 1 mg/ml solution (Ethanol won't dissolve Me-O-eCTZ).
2. Use this stock solution to make an aqueous solution in PBS or TBS (e.g. 50 µM for luminometer assays equal to 231.8 µl (1mg/ml) in 10 ml PBS).
3. Store dissolved **Prolume Purple** at -80°C, do not store the aqueous working solution (it will oxidize over time). **Prolume Purple** has the same stability in aqueous solutions like any other Coelenterazine analogue.

HOW TO USE “Prolume Purple”

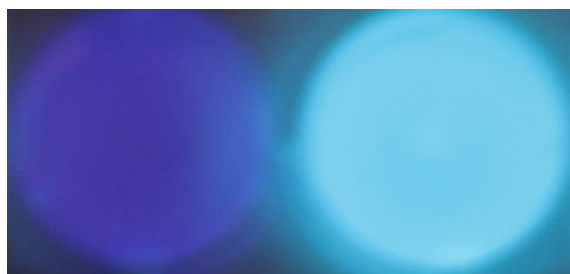
Properties of Nanolight™ Prolume Purple Cat. #369

A. Comparison of emission spectra of e-CTZ and “Prolume Purple” with *Renilla muelleri* Luciferase



Prolume Purple
(Me-O-eCTZ)

eCTZ

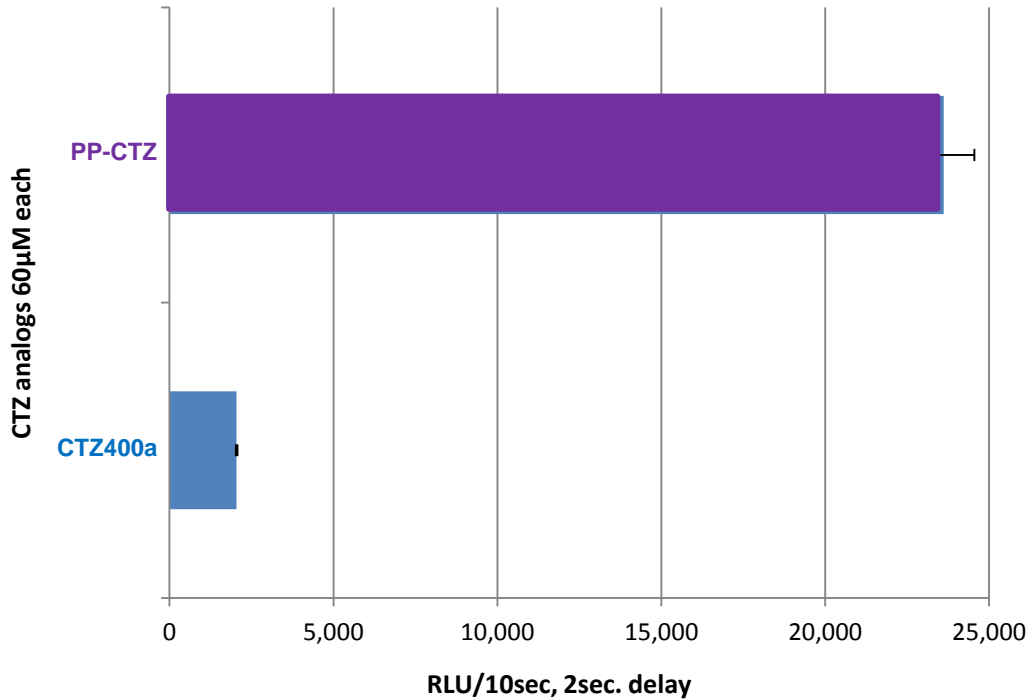


Pictures were taken with a conventional DSLR camera with exposure time of 1 sec.

Wildtyp *Renilla muelleri* luciferase was used as a luciferase.

HOW TO USE “Prolume Purple”

B. Comparison of luminescent intensity between “deep blue C” and “Prolume Purple” with wt RmLuc integrated over 10 sec.:



CTZ400a, also known as “deep blue C” emits around 400 nm with RLuc and RLuc8. The luminescent quantum yield of “Prolume Purple” (PP-CTZ) is around **13-fold higher** than CTZ400a.