

## Instructions for CAT#3031 Water-soluble Coelenterazine (CTZ-SOL) for *in vivo* use

### Content:

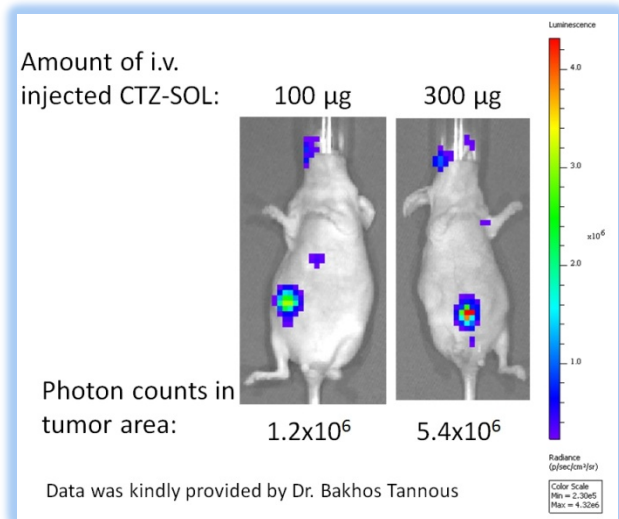
**500 µg CTZ per vial** of sterile, water-soluble Coelenterazine for the *in vivo* use with *Gaussia* or *Renilla* Luciferase

### Storage:

Please store unopened vials at -80°C, for shorter periods of time at -20°C. Keep dark and dry. Reconstituted Coelenterazine should be used within a day<sup>§</sup>; do not refreeze.

### Usage:

1. Warm vial to room temperature.
2. Depending on the amount of CTZ you want to inject use following amounts of **sterile water** (do not use PBS) to dissolve the CTZ-SOL:



<u>Desired CTZ amount per injection</u>	<u>added volume</u>	<u>volume per injection</u>
50 µg	500 µl	10 injections of 50 µl
100 µg	250 µl	5 injections of 50 µl
250 µg	200 µl	2 injections of 100 µl
500 µg	100 µl	one injection of 100 µl

**3.** After addition of water let the powder rehydrate for 3 min and vortex the vial until completely dissolved (might take up to a minute using low volume). Let the vial sit on the bench-top until air-bubbles disappear (approx. 5-10 min). Draw up the desired volume (see table above) with Insulin syringe (e.g. BD cat. # 328430). Inspect for, and remove any air bubbles in the syringe and flush the needle. Inject via tail vein to ensure optimal distribution throughout the body. The advantage of using Insulin syringes is their very low (<2µl) holdup volume! **Inject slowly.**

\*Gaussia Luciferase has a higher turnover (higher  $K_m$ ) than other luciferases, you will have to use more Coelenterazine to appreciate its potential. Native Coelenterazine (as water soluble form or regular powder) 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.

<sup>§</sup>Loss of activity is approx. 10% after 24 hours if stored as reconstituted liquid at room temperature.