TECHNICAL DATA SHEET

Fluorescent Imaging Reagent



800CW-ZOL

Catalogue Number: BV551005

* For Laboratory Use. A product for research purposes only, not for human use.

DESCRIPTION: 800CW-ZOL is a fluorescent bisphosphonate imaging reagent, which can be used for both in vitro and in vivo studies.

CONTENTS: Each vial contains 110 nmol of 800CW-ZOL in lyophilized dry solid form. The reagent can be reconstituted with aqueous buffers (calcium/magnesium free PBS buffer, 0.9% NaCl solution, or many other buffers of the customers' choice with near neutral pH).

PROPERTIES: The physical properties of 800CW-ZOL can be found in **Table 1** and **Figure 1**.

STORAGE & HANDLING:

Table 1. Properties of 800CW-ZOL

Parameter	Value
M.W.	1332.4 g/mol
Abs Max ¹	774 nm
Em Max ¹	789 nm
Extinction Coefficient ²	240,000 M ⁻¹ cm ⁻¹
Purity ³	> 98 %
Appearance	Green solid

¹UV-VIS absorption and fluorescence emission were measured in 1X PBS buffer, pH 7.4. The maximum wavelengths shown above have ±1 nm instrumentation error.

- Upon receipt, 800CW-ZOL should be **stored at \leq -20 °C and protected from light**. When stored and handled properly, 800CW-ZOL is stable for at least 18 months in dry solid form.
- Before opening the vial, check to ensure that all compounds are at the bottom of the vial.
- After reconstituting with aqueous buffers, gently swirl the solution to ensure that the solid is fully dissolved in solution.
- Once reconstituted with aqueous buffers, it is highly recommended to aliquot the solutions for longer-term use, and the aliquots should be stored at 4 °C or -20 °C and protected from light.

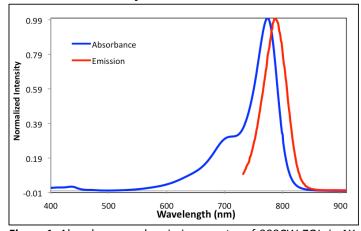


Figure 1. Absorbance and emission spectra of *800CW-ZOL*, in 1X PBS buffer, pH 7.4

IMAGING APPLICATIONS:

- 800CW-ZOL and similar reagents were previously applied in mice, rats and rabbits studies at doses of approximately 50-100 nmol/Kg, which could be a starting point for use in other animal models.
- We also have experience using sequential fluorescent reagents, as well as multiple fluorescent reagents in a single administration; and we would be happy to provide technical advice/support if needed. Please send your technical questions to inquiry@biovinc.com.

 $^{^2}$ The extinction coefficient for 800CW-ZOL is assumed the same as IRDye 800CW.

 $^{^3\}text{Purity}$ is determined by reverse phase HPLC, ^1H NMR, and ^{31}P NMR spectroscopy.

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NOTES TO CUSTOMERS:

- BioVinc's fluorescent imaging reagents are offered for research purposes only, and are not intended for human use.
- The purchase of this product conveys to the buyer the limited, non-transferable right to use the purchased amount of the product and the components of the product in research conducted by the buyer. BioVinc's products are not available for resale or other commercial uses without a specific agreement from BioVinc LLC.

^{*}For more references, please visit www.biovinc.com/references.