

Product Data Sheet

Product Name: Z-His-OBzl

Cat. No.: GA23835

Chemical Properties

Cas. No. 20794-07-4

Formula $C_{21}H_{21}N_3O_4$ M.Wt 379.42

Solubility Soluble in DMSO Storage Store at -20°C, protect from light

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure



Background

Z-His-OBzl is a derivative of histidine (His) and can mediate the coordination of Mn^{2+} co-assembly to form peptide-based photosensitive nanomedicines^[1]. Z-His-OBzl acts as the template amino acid derivative to induce near-infrared (NIR) cyanine dye indocyanine green (ICG) co-assembly due to the amphiphilic and positively charged nature^[2]. Z-His-OBzl regulates the self-assembly of phthalocyanine tetrasulfonic acid (Pc) into nanoparticles without vesicle structures, exhibiting fluorescence quenching in solution^[3]. Z-His-OBzl can be combined with the endogenous biological pigment biliverdin (BV) to prepare nanoparticles with wide near-infrared absorption, which act as

Caution: Product has not been fully validated for medical applications. For research use only.

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photoacoustic imaging (PAI) contrast agents for diagnosing tumors with high spatial resolution and penetration depth^[4].

References:

- [1] Li S, van Hest J C M, Xing R, et al. Peptide self-assembly meets photodynamic therapy: from molecular design to antitumor applications[J]. Chemical Communications, 2025, 61(73): 13841-13851.
- [2] Li S, Chang R, Zhao L, et al. Two-photon nanoprobe based on bioorganic nanoarchitectonics with a photo-oxidation enhanced emission mechanism[J]. Nature Communications, 2023, 14(1): 5227.
- [3] Han J, Liu K, Chang R, et al. Photooxidase-mimicking nanovesicles with superior photocatalytic activity and stability based on amphiphilic amino acid and phthalocyanine co-assembly[J]. Angewandte Chemie, 2019, 131(7): 2022-2026.
- [4] Chang R, Zhao L, Xing R, et al. Functional chromopeptide nanoarchitectonics: molecular design, self-assembly and biological applications[J]. Chemical Society Reviews, 2023, 52(8): 2688-271

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