

## Product Data Sheet

Product Name: DFHBI-BI

Cat. No.: GC80337

### Chemical Properties

Cas. No. 2561482-42-4

Formula  $C_{19}H_{14}F_2N_4O_2$

M.Wt 368.34

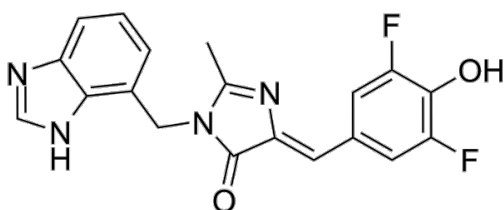
Solubility

Storage Store at -20°C

**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

DFHBI-BI is a mimic of the green fluorescence protein chromophore. DFHBI-BI can be bound and activated by Broccoli (a fluorogenic RNA aptamer) with higher affinity. DFHBI-BI prevents thermal unfolding of Broccoli at 37°C in mammalian cells, subsequently forming more fluorescent Broccoli-BI complexes. The fluorescence wavelength is 559/635 nm [1].

In Vitro, DFHBI-BI staining the cells with 10 µM for 2 hours, the fluorescence intensity of the cells was low. DFHBI-BI was applied to HEK293T cells expressing Broccoli circular RNA, and an increase in fluorescence intensity was observed [1].

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

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### References:

[1]. Xing Li, et al. Fluorophore-Promoted RNA Folding and Photostability Enables Imaging of Single Broccoli-Tagged mRNAs in Live Mammalian Cells. *Angew Chem Int Ed Engl.* 2020 Mar 9;59(11):4511-4518.

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