PRODUCT INFORMATION



DFHBI

Item No. 34555

CAS Registry No.: 1241390-29-3

Formal Name: 5Z-[(3,5-difluoro-4-hydroxyphenyl)methylene]-3,5-

dihydro-2,3-dimethyl-4H-imidazol-4-one

MF: $C_{12}H_{10}F_2N_2O_2$

FW: 252.2 **Purity:** ≥95% Ex./Em. Max: 447/501 nm Supplied as: A solid Storage: -20°C Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

DFHBI is supplied as a solid. A stock solution may be made by dissolving the DFHBI in the solvent of choice, which should be purged with an inert gas. DFHBI is soluble in ethanol (heated) and DMSO. The solubility of DFHBI in these solvents is approximately 5 and 100 mM, respectively.

Description

DFHBI is a fluorescent probe for RNA.1 It fluoresces upon binding to RNA aptamers, such as Spinach or Spinach 2, and displays excitation/emission maxima of 447/501 nm, respectively.² DFHBI has been used to image RNA in live cells.1

References

- 1. Paige, J.S., Wu, K.Y., and Jaffrey, S.R. RNA mimics of green fluorescent protein. Science 333(6042), 642-646 (2011).
- 2. Song, W., Strack, R.L., Svensen, N., et al. Plug-and-play fluorophores extend the spectral properties of Spinach. J. Am. Chem. Soc. 136(4), 1198-1201 (2014).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 09/16/2024

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD ANN ARBOR, MI 48108 · USA PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640 CUSTSERV@CAYMANCHEM.COM WWW.**CAYMANCHEM**.COM