Hello Bio, Inc. 304 Wall St., Princeton, NJ 08540 USA

T. 609-683-7500 F. 609-228-4994

customercare-usa@m2stage.hellobio.com



DATASHEET

FITC Phalloidin

Product overview

Name FITC Phalloidin Cat No HB0814

Alternative names Fluorescein Phalloidin, Phalloidin Fluorescein Isothiocyanate Labeled, Phalloidin (FITC), Fl-phalloidin Overview

Fluorescein Isothiocyanate (FITC) labeled Phalloidin binds and labels F-actin but not G-actin.

It is a green fluorescent stain which allows high-contrast discrimination of actin. Non-specific binding of phalloidin is negligible and it provides more intense labeling of F-actin than antibodies.

Uses and applications

FITC Phalloidin has a wide range of applications and can be used with formaldehyde-fixed and permeabilized tissue sections, cell cultures and cell-free experiments. It may also be used with deparaffinized paraffin-embedded samples.

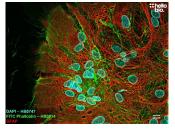
Biological action Dyes & stains Purity >93%

Description Green fluorescent cytoskeleton stain. Binds and labels F-actin.

Images









Biological Data

Application notes

For our 300 tests pack, to make your stock solution, you should dissolve the contents of the vial in 1.5 mL of methanol or DMSO.

#Protocol 1: FITC-Phalloidin labelling of primary cultured neurones.

• Primary neurones were isolated and cultured from P2 rats and grown for three weeks before being fixed with 4% paraformaldehyde.

- Coverslips containing neuronal cell cultures were labelled for GFAP following standard immunohistochemical approaches.
- The secondary antibody was incubated for 1 hour with the addition of FITC Phalloidin (183nM, 1:40 dilution of staining solution)
- Coverslips were then submerged in 1µg/ml DAPI diluted in PBS for 1 minute.
- Coverslips were mounted and imaged with a fluorescent microscope.

Solubility & Handling

Storage instructions

-20°C

Solubility overview Important

Soluble in DMSO (NB: may appear colourless in very dry solvent)

This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not

for human or veterinary use

Chemical Data

Chemical name 7-[(4R)-N5-[[(3,6-Dihydroxy-3-oxospiro[isobenzofuran-1(3H),9-[9H]xanthen]-5-yl)amino]thioxomethyl]-

4-hydroxy-4-methyl-L-ornithine]phalloidin

Molecular Weight Chemical structure 1177.26

 $S=C(NCC1CSC(C)(S1)CC1NC(=O)C2NC(=O)C(C)NC(=O)C3CC(O)CN3C(=O)C(CSc3[nH]c4ccccc) \\ C=C(NCC1CSC(C)(S1)CC1NC(=O)C2NC(=O)C3CC(O)CN3C(=O)C(CSc3[nH]c4ccccc) \\ C=C(NCC1CSC(C)(S1)CC1NC(=O)C2NC(=O)C3CC(O)CN3C(=O)C(CSc3[nH]c4ccccc) \\ C=C(NCC1CSC(C)(S1)CC1NC(=O)C2NC(=O)C3CC(O)CN3C(=O)C(CSc3[nH]c4ccccc) \\ C=C(NCC1CSC(C)(S1)CC1NC(=O)C3CC(O)CN3C(=O)C(CSc3[nH]c4ccccc) \\ C=C(NCC1CSC(C)(S1)CC1NC(C)CN3C(C)CC(C)CN3C(C)CN$

4c3C2)NC(=O)C(NC(=O)C(C)NC1=O)C(C)O)Nc1ccc2c(c1)C(=O)OC12c2ccc(O)cc2Oc2cc(O)ccc12

InChiKey WUSBHBKXQMYBEH-ADESOLLTSA-N

MDL number MFCD00147902

Excitation 496 **Emission** 516 nm

References

Cytoskeletal F-actin patterns quantitated with fluorescein isothiocyanate-phalloidin in normal and transformed cells

Verderame M et al (1980) Proc Natl Acad Sci U S A 77(11)

PubMedID 6256751

Labeling cytoskeletal F-actin with rhodamine phalloidin or fluorescein phalloidin for imaging

Chazotte B (2010) Cold Spring Harb Protoc 2010(5) **PubMedID**20439405

Quantification of Filamentous Actin (F-actin) Puncta in Rat Cortical Neurons

Li H et al (2016) J Vis Exp 108

PubMedID 26889716