

DATASHEET

FITC Phalloidin

Product overview

Name	FITC Phalloidin
Cat No	HB0814
Alternative names	Fluorescein Phalloidin, Phalloidin Fluorescein Isothiocyanate Labeled, Phalloidin (FITC), FI-phalloidin
Biological description	<u>Overview</u>

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

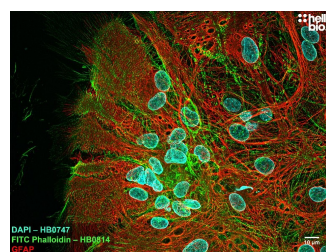
It is a green fluorescent stain which allows high-contrast discrimination of actin. Non-specific binding of phalloidin is negligible and it provides more intense labeling of F-actin than antibodies.

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 samples. It may also be used with de-paraffinized 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.
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#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

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

Important

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

Chemical Data

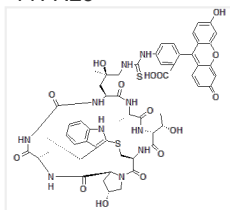
Chemical name

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

1177.26

Chemical structure



Molecular Formula

C₅₆H₆₀N₁₀O₁₅S₂

CAS Number

915026-99-2

PubChem identifier

347679539

SMILES

S=C(NCC1CSC(C)(S1)CC1NC(=O)C2NC(=O)C(C)NC(=O)C3CC(O)CN3C(=O)C(CSc3[nH]c4ccccc4c3C2)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