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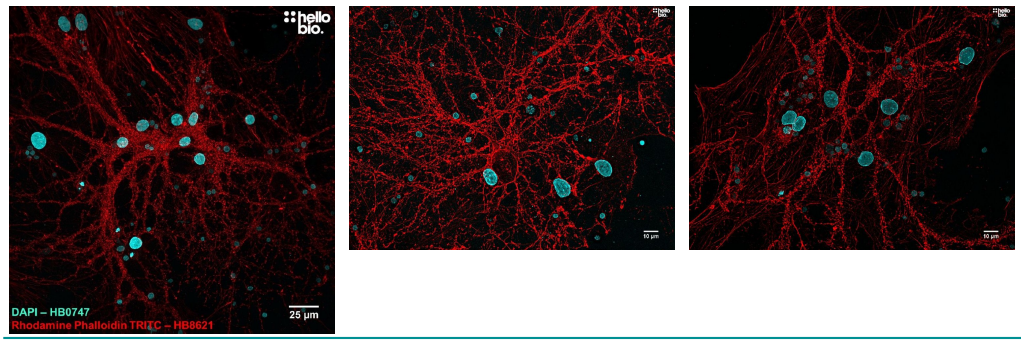
DATASHEET

Rhodamine phalloidin-TRITC

Product overview

Name	Rhodamine phalloidin-TRITC
Cat No	HB8621
Biological description	Red-orange fluorescent cytoskeleton stain which binds and labels F-actin. Has a wide range of applications and can be used in tissue sections, cell cultures and cell-free experiments samples.
Biological action	Dyes & stains
Purity	>95%
Description	Red-orange fluorescent cytoskeleton stain.

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: Rhodamine Phalloidin TRITC labelling of primary cultured neurones.

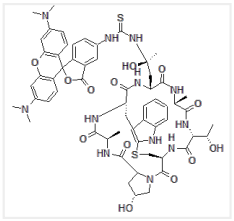
- Primary neurones were isolated and cultured from P2 rats and grown for three weeks before being fixed with 4% paraformaldehyde and permeabilised with 0.1% Triton X-100.
- Coverslips were incubated for 1 hour with Rhodamine Phalloidin TRITC (183nM, 1:40 dilution of staining solution)
- Coverslips were 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)-5-[[[[4-[3,6-Bis(dimethylamino)xanthylium-9-yl]-3-carboxyphenyl]amino]thioxomethyl]amino]-4-hydroxy-L-leucine]phalloidin
Molecular Weight	1231.4
Chemical structure	
Molecular Formula	$C_{60}H_{70}N_{12}O_{13}S_2$
CAS Number	1926163-50-9
PubChem identifier	137247539
SMILES	C[C@H]1C(=O)N[C@H]2CC3=C(NC4=CC=CC=C34)SC[C@@H](C(=O)N5C[C@H](C[C@H]5C(=O)N1)O)NC(=O)[C@H](NC(=O)[C@@H](NC(=O)[C@@H](NC2=O)C[C@](C)(CNC(=S)NC6=CC(=C(C=C6)C(=O)[O-])C7=C8C=CC(=[N+](C)C)C=C8OC9=C7C=CC(=C9)N(C)C)O)C)[C@H](C)O
InChiKey	NRDVPFYYTLFSBJ-IZZNSDNCSA-N
MDL number	MFCD30748671
Excitation	~540
Emission	565 nm

References

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

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

Distribution and orientation of rhodamine-phalloidin bound to thin filaments in skeletal and cardiac myofibrils

Zhukarev V *et al* (1997) Cell Motil Cytoskeleton 37(4)
PubMedID 9258508

Formation and destabilization of actin filaments with tetramethylrhodamine-modified actin

Kudryashov DS *et al* (2004) Biophys J 87(2)
PubMedID 15298916

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