

Small Molecules

Latrunculin A

Inhibits actin polymerization



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TOLL FREE PHONE 1 800 667 0322 • PHONE +1 604 877 0713

INFO@STEMCELL.COM • TECHSUPPORT@STEMCELL.COM

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Catalog #100-0562
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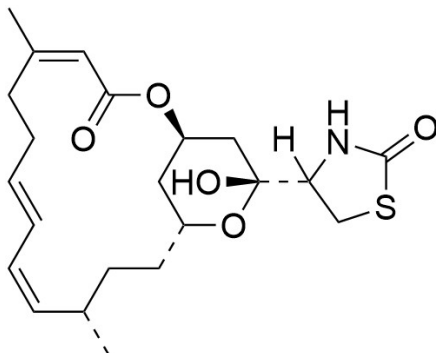
50 µg
100 µg

Product Description

Latrunculin A is a 2-thiazolidinone macrolide isolated from the Red Sea sponge *Latrunculia magnifica* (Coué et al.). It forms a 1:1 molar complex with monomeric G-actin and inhibits actin polymerization in vitro ($K_d = 0.2 \mu\text{M}$; Coué et al.). Actins are important for numerous cellular functions such as endocytosis, cell migration, and tumor invasion. This product is supplied as a 100 µg/mL solution in ethanol.

Molecular Name:	Latrunculin A
Alternative Names:	NSC 613011
CAS Number:	76343-93-6; 64-17-5
Chemical Formula:	$\text{C}_{22}\text{H}_{31}\text{NO}_5\text{S}$
Molecular Weight:	421.6 g/mol
Purity:	≥ 95%
Chemical Name:	(4R)-[(1R,4Z,8E,10Z,12S,15R,17R)-17-hydroxy-5,12-dimethyl-3-oxo-2,16-dioxabicyclo[13.3.1]nonadeca-4,8,10-trien-17-yl]-2-thiazolidinone

Structure:



Properties

Physical Appearance:	A solution in ethanol
Storage:	Product stable at -20°C as supplied. Protect product from prolonged exposure to light. Stable as supplied for 12 months from date of receipt.
Solubility:	Not applicable

Published Applications

CANCER RESEARCH

- Disrupts actin cytoskeleton in tumor cells (Hayot et al.).

References

Coué M et al. (1987) Inhibition of actin polymerization by latrunculin A. FEBS Lett 213(2): 316–8.

Hayot C et al. (2006) Characterization of the activities of actin-affecting drugs on tumor cell migration. Toxicol Appl Pharmacol 211(1): 30–40.

Related Small Molecules

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