

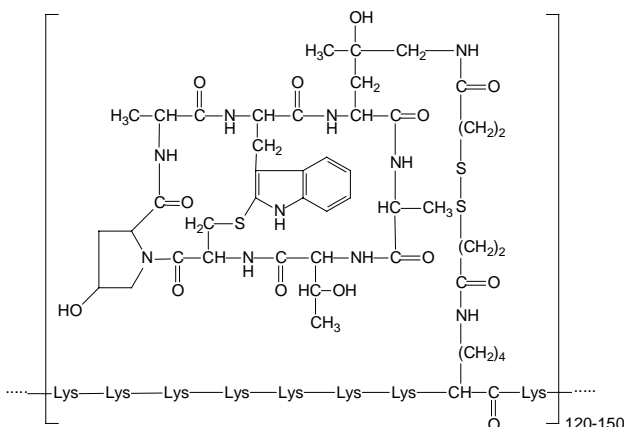
Product Information

PHALLOIDIN, POLY-L-LYSINE BOUND

Product Number **P 0243**

Storage Temperature 2-8 °C

Synonyms: Poly-L-lysyl-4,5-dithiasuberoyl-aminophalloidin



Product Description

Appearance: amorphous solid

Purity: approximately 90%

Phalloidin is a fungal toxin isolated from the poisonous mushroom *Amanita phalloides*. The toxicity of phalloidin is attributed to its ability to bind to F actin in liver and muscle cells, thus strongly stabilizing the actin filaments. Phalloidin has been found to bind only to polymeric and oligomeric forms of actin and not to monomeric actin. The dissociation constant of the actin-phalloidin complex has been determined to be on the order of 3×10^{-8} M.¹ Phalloidin differs from amanitin in its rapidity of action; at high dose levels, death of mice or rats occurs within 1 to 2 hours following administration of phalloidin.

It is predicted that poly-L-Lysine bound phalloidin is approximately 100 fold more potent than the unbound form, based on experiments with a similar toxin, poly-L-ornithine bound β -amanitin.²

Reagent

By weight, each vial contains 20% phalloidin (200 μ g), 50% poly-L-lysine (average molecular weight is 25,000) with the balance as sodium chloride as a stabilizer.

Precautions and Disclaimer

WARNING: Extremely hazardous! Be aware of the risks and familiar with safety procedures before you use this product.

Preparation Instructions

Phalloidin, poly-L-lysine bound, is soluble in water.

Storage

Phalloidin, poly-L-lysine bound, should be stored at 2-8 °C in a desiccator. Solutions should be prepared fresh and protected from light.

References

1. Faulstich, H. et al., Preparation of tetramethyl-rhodamyl-phalloidin and uptake of the toxin into short-term cultured hepatocytes by endocytosis. *Exp. Cell Res.*, **144**, 73-82 (1983).
2. Bermbach, U. and Faulstich, H., Epidermal growth factor labeled beta-amanitin-poly-L-ornithine: preparation and evidence for specific cytotoxicity. *Biochemistry*, **29**, 6839-6845 (1990).
3. Vetter, J., Toxins of *Amanita phalloides*. *Toxicon.*, **36**, 13-24 (1998).

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