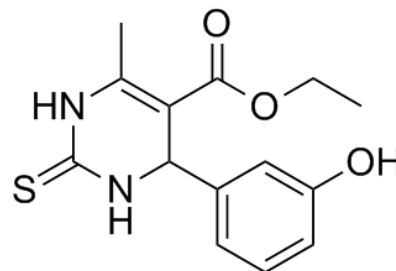


Product Name : Monastrol
Cat. No. : PC-42308
CAS No. : 329689-23-8
Molecular Formula : C₁₄H₁₆N₂O₃S
Molecular Weight : 292.35344
Target : Kinesin
Solubility : DMSO: ≥ 33 mg/mL



Biological Activity

Monastrol is a potent, specific, allosteric and reversible **mitotic kinesin Eg5** inhibitor with IC₅₀ of 14 μM (microtubule motility inhibition).

Monastrol does not inhibit microtubule motility driven by conventional kinesin at 200 μM.

Monastrol inhibits both the basal and the microtubule-stimulated ATPase activity of the Eg5 motor domain, does not compete with ATP binding to Eg5; arrests cells in mitosis with monoastrol spindles.

(S)-monastrol is a more potent inhibitor of Eg5 activity in vitro and in vivo.

References

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DeBonis S, et al. *Biochemistry*. 2003 Jan 21;42(2):338-49.

Maliga Z, et al. *Chem Biol*. 2002 Sep;9(9):989-96.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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