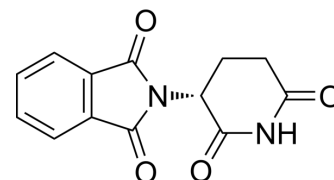


(R)-Thalidomide

Cat. No.:	HY-14658B
CAS No.:	2614-06-4
Molecular Formula:	C ₁₃ H ₁₀ N ₂ O ₄
Molecular Weight:	258.23
Target:	Others
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	(R)-Thalidomide ((R)-(+)-Thalidomide) is the R-enantiomer of Thalidomide. (R)-Thalidomide has psychomotor stabilizing properties ^{[1][2]} .
In Vitro	The transport of the (R)-Thalidomide from the R-imprinted MIP-1 through the donor phase to the receiver phase is much less owing to the stronger retention of the thalidomide in the organic phase. With the affinity of (R)-Thalidomide by the MIP present surface capture, that is more strongly than the other forms. In the case of (R)-Thalidomide, it is found to bind to the selective sites of the MIP more strongly than the other which reflects their different biological entities ^[1] . The (S)-Thalidomide imprints MIP nanoparticles exerted a greater cytotoxic effect on the caco-2 cells than the (R)-Thalidomide imprinted MIPs ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	Adult female F344 rats are implanted with 9L gliosarcoma tumours intracranially, subcutaneously (flank), or both. Effectiveness of oral thalidomide alone, and with intraperitoneal BCNU or cisplatin combination chemotherapy, is assessed after several weeks treatment. Both serum and tissue concentrations of (R)-thalidomide are 40-50% greater than those of (S)-thalidomide. Co-administration of BCNU or cisplatin with thalidomide did not alter the concentration enantioselectivity ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. Murphy S, et al. Enantioselectivity of thalidomide serum and tissue concentrations in a rat glioma model and effects of combination treatment with cisplatin and BCNU. *J Pharm Pharmacol.* 2007 Jan;59(1):105-14.
- [2]. Eriksson T, et al. Intravenous formulations of the enantiomers of thalidomide: pharmacokinetic and initial pharmacodynamic characterization in man. *J Pharm Pharmacol.* 2000 Jul;52(7):807-17.

Caution: Product has not been fully validated for medical applications. For research use only.

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