

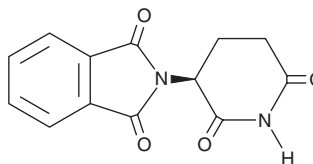
PRODUCT INFORMATION



(-)-Thalidomide

Item No. 14967

CAS Registry No.: 841-67-8
Formal Name: 2-[(3S)-2,6-dioxo-3-piperidinyl]-1H-isoindole-1,3(2H)-dione
Synonyms: (L)-Thalidomide, NSC 91730, (-)-N-Phthaloylgluamimide
MF: C₁₃H₁₀N₂O₄
FW: 258.2
Purity: ≥95%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

(-)-Thalidomide is supplied as a solid. A stock solution may be made by dissolving the (-)-thalidomide in the solvent of choice, which should be purged with an inert gas. (-)-Thalidomide is slightly soluble in DMSO, dimethyl formamide, and methanol (warmed).

Description

(-)-Thalidomide is an active enantiomer of (±)-thalidomide (Item No. 14610) and has immunomodulatory and teratogenic activities.¹⁻³ It enhances TNF-α production induced by phorbol 12-myristate 13-acetate (TPA; Item No. 10008014) in HL-60 cells when used at concentrations ranging from 0.1 to 100 μM.¹ Preincubation of isolated Rhode Island Red (RIR) chicken donor blood with (-)-thalidomide (10 mg/ml) reduces recipient chicken embryo splenomegaly in a model of graft versus host disease.² (-)-Thalidomide (150 mg/kg) induces fetal malformations when administered to pregnant female rabbits.³

References

1. Nishimura, K., Hashimoto, Y., and Iwasaki, S. (S)-form of α-methyl-N(α)-phthalimidoglutarimide, but not its (R)-form, enhanced phorbol ester-induced tumor necrosis factor-α production by human leukemia cell HL-60: Implication of optical resolution of thalidomidal effects. *Chem. Pharm. Bull. (Tokyo)* **42(5)**, 1157-1159 (1994).
2. Field, E.O., Gibbs, J.E., Tucker, D.F., *et al.* Effect of thalidomide on the graft versus host reaction. *Nature* **211(5055)**, 1308-1310 (1966).
3. Fabro, S., Smith, R.L., and Williams, R.T. Toxicity and teratogenicity of optical isomers of thalidomide. *Nature* **215(5098)**, 296 (1967).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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