

Product Name: Lenalidomide

Catalog No.: 6305

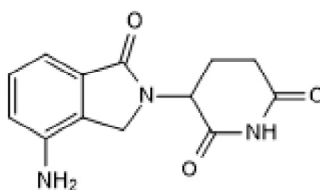
Batch No.: 3

CAS Number: 191732-72-6

IUPAC Name: 3-(4-Amino-1,3-dihydro-1-oxo-2*H*-isoindol-2-yl)-2,6-piperidinedione

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₁₃H₁₃N₃O₃
Batch Molecular Weight: 259.26
Physical Appearance: Off White solid
Solubility: DMSO to 100 mM
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 100.0% purity
¹H NMR: Consistent with structure
Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen
Theoretical	60.23	5.05	16.21
Found	60.16	4.96	16.02

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

Product Name: Lenalidomide

Catalog No.: 6305

3

CAS Number: 191732-72-6

IUPAC Name: 3-(4-Amino-1,3-dihydro-1-oxo-2*H*-isoindol-2-yl)-2,6-piperidinedione

Description:

Lenalidomide is a thalidomide analog. Immune modulatory drug and cereblon binding compound. Induces ubiquitination and degradation of casein kinase (CK) 1 α by the E3 ubiquitin ligase CRL4^{CRBN}. Also TNF- α inhibitor and angiogenesis inhibitor. Promotes degradation of transcription factor SALL4.

Physical and Chemical Properties:

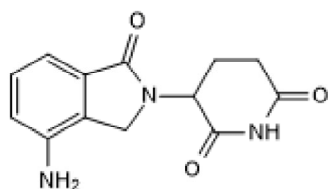
Batch Molecular Formula: C₁₃H₁₃N₃O₃

Batch Molecular Weight: 259.26

Physical Appearance: Off White solid

Minimum Purity: \geq 98%

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 100 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. *Unless contradicted by product-specific protocols or instructions, our standard recommendations apply:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Chamberlain et al (2019) Evolution of cereblon-mediated protein degradation as a therapeutic modality. *ACS Med.Chem.Lett.* **10** 1592. PMID: 31857833.

Donovan et al (2018) Thal. promotes degradation of SALL4, a transcription factor implicated in Duane Radial Ray Syndrome. *Elife* **7** e38430. PMID: 30067223.

Petzold et al (2016) Structural basis of lenalidomide-induced CK1a degradation by the CRL4(CRBN) ubiquitin ligase. *Nature* **532** 127. PMID: 26909574.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

bio-techne.com

info@bio-techne.com

techsupport@bio-techne.com

North America

Tel: (800) 343 7475

China

info.cn@bio-techne.com

Tel: +86 (21) 52380373

Europe Middle East Africa

Tel: +44 (0)1235 529449

Rest of World

www.tocris.com/distributors

Tel:+1 612 379 2956