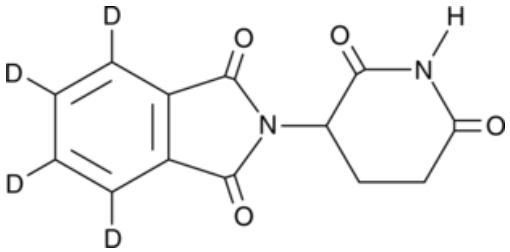
Product Data Sheet

Product Name: (±)-Thalidomide-d4
Cat. No.: GC46008

Chemical Properties

Cas. No.	1219177-18-0		
SMILES	O=C(C1=C2C([2H])=C([2H])C([2H])=C1[2H])N(C3C(NC(CC3)=O)=O)C2=O		
Formula	C13H6D4N2O4	M.Wt	262.3
Solubility	DMF: 12 mg/ml,DMSO: 12 mg/ml,DMSO:PBS (pH 7.2) (1:1): 0.11 mg/ml	Storage	Store at -20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		

Structure



Background

(±)-Thalidomide-d4 is intended for use as an internal standard for the quantification of (±)-thalidomide by GC- or LC-MS. (±)-Thalidomide is an immunomodulatory and antiproliferative compound that interacts directly with the protein CRBN (IC50 = 8.5 nM), a ubiquitously-expressed E3 ligase, and CRBN-DDB1 complexes.1,2

|1. Ito, T., Ando, H., Suzuki, T., et al. Identification of a primary target of thalidomide teratogenicity. Science 327(5971), 1345-1350 (2010).|2. Lopez-Girona, A., Mendy, D., Miller, K., et al. Cereblon is a direct protein target for immunomodulatory and antiproliferative activities of lenalidomide and pomalidomide. Leukemia 26(11), 2326-2335 (2012).

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