

Catalog # 10-3921 Iberdomide

CAS# 1323403-33-3

(S)-3-(4-((4-(Morpholinometnyl)benzyl)oxy)-1-oxoisoindolin-2-yl)piperidine-2,6-dione; CC-220 Lot # FBS3089

Iberdomide is a modulator of the cullin ring ligase 4-cereblon E3 ubiquitin ligase complex with higher affinity (IC₅₀ = 60 nM) than lenalidomide and pomalidomide leading to more potent degradation of Ikaros (IKZF1; EC₅₀ = 1 nM)) and Aiolos (IKZF3; EC₅₀ = 0.5 nM). It is more specific for the cereblon complex and does not degrade GSPT1 or CK1α. It displays antitumor and immunostimulatory activity in lenalidomide- and pomalidomide-resistant multiple myeloma cells. Iberdomide has also shown efficacy in treating the autoimmune disease cutaneous lupus erythematosus (CLE). It was also shown to act as an HIV-1 latency reversal agent in in CD4+ T-cells.

- Matyskiela et al. (2018), A Cereblon Modulator (CC-220) with Improved Degradation of Ikaros and Aiolos; J. Med. Chem., 61
- 2) Bjorkland et al. (2020), Iberdomide (CC-220) is a potent cereblon E3 ligase modulator with antitumor and immunostimulatory activities in lenalidomide- and pomalidomide-resistant multiple myeloma cells with dysregulated CRBN; Leukemia, **34** 1197
- 3) Sprow et al. (2022), Emerging Therapies in Cutaneous Lupus Erythematosus; Front. Med. (Lausanne), 9 968323
- 4) Ne et al. (2022), Catchet-MS identifies IKZF1-targeting thalidomide analogues as novel HIV-1 latency reversal agents; Nucleic Acids Res., **50** 5577

PHYSICAL DATA

 $\begin{tabular}{lll} Molecular Weight: & 449.51 \\ Molecular Formula: & $C_{25}H_{27}N_3O_5$ \\ Purity: & >98\% by HPLC \\ \end{tabular}$

NMR: (Conforms)
DMSO (50 mg/ml)

Physical Description: White solid.

Solubility:

Storage and Stability: Store as supplied at -20°C for up to 2 years from the date of purchase.

Solutions in DMSO may be stored at -20°C for up to 3 months.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.