

Product Data Sheet

Product Name: USL311
Cat. No.: GC33413

Chemical Properties

Cas. No. 1373268-67-7

SMILES O=C(C1=NC(N2CCN(C3CCN(C(C)C)CC3)CCC2)=CC=C1)NC4=CC=NC=C4

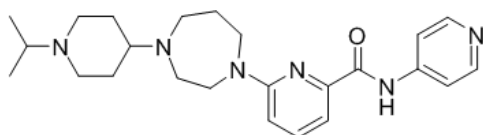
Formula $C_{24}H_{34}N_6O$ M.Wt 422.57

Solubility DMSO : 25 mg/mL (59.16 mM) 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

USL311 is an orally active CXCR4-specific antagonist that inhibits the binding of stromal cell-derived factor-1 (SDF-1/CXCL12) to CXCR4^[1-2]. Chemokine C-X-C receptor 4 (CXCR4) is a key axis of normal development and immunity and is often aberrantly expressed in various cancer types^[3]. USL311 has anticancer effects, such as in glioblastoma, and can be used in combination with

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

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lomustine to treat patients with advanced solid tumors and recurrent GBM^[2].

References:

- [1]. Peter Richardson. Usl-311 for use in the treatment of cancer. WO2018162924A1.
- [2]. Rueda A, Serna N, Mangues R, et al. Targeting the chemokine receptor CXCR4 for cancer therapies[J]. Biomarker Research, 2025, 13(1): 68.
- [3]. MacLean M R, Walker O L, Arun R P, et al. Informed by cancer stem cells of solid tumors: advances in treatments targeting tumor-promoting factors and pathways[J]. International journal of molecular sciences, 2024, 25(7): 4102.

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