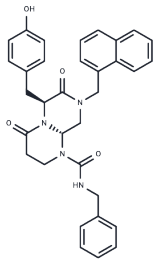
Data Sheet (Cat.No.T2237)

TargetMol

ICG001

Chemical Properties



CAS No. : 847591-62-2

Formula: C33H32N4O4

Molecular Weight: 548.63

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	ICG001 antagonizes Wnt/β-catenin/TCF-mediated transcription and specifically binds to element-binding protein (CREB)-binding protein (CBP) with IC50 of 3 μM, but is not the related transcriptional coactivator p300.
Targets(IC50)	Epigenetic Reader Domain,Wnt/beta-catenin
In vitro	ICG001 binds specifically to CBP but not the related transcriptional coactivator p300, thereby disrupting the interaction of CBP with β-catenin. Treatment with ICG001 selectively induces apoptosis in colon carcinoma cells but not in normal colonic epithelial cells and reduces in vitro growth of colon carcinoma cells[1][2].
In vivo	ICG001 exhibits antitumor activity in the mouse xenograft models of colon cancer. The initial results of the Phase I clinic trial of ICG001 has been disclosed publically. The drug exhibits an acceptable toxicity profile with only one dose-limiting toxicity of grade 3 reversible hyperbilirubinaemia. An Open-Label dose-escalation phase I/II study of ICG001 for patients with advanced myeloid malignancies is still ongoing[2].
Cell Research	ICG-001 is dissolved in DMSO. To evaluate effects of ICG-001 on α-SMA and collagen type 1 expression, RLE-6TN cells are treated with TGF-β1 (0.25 ng/mL) in the presence or absence of ICG-001 (5.0 μM). After 24 h, cells are harvested and mRNA isolated for analysis by qPCR. RNA is reverse-transcribed using SuperScript reverse transcriptase. Quantitative PCR is performed with SYBR-Green PCR using Real-Time PCR System HT7900. The amplification protocol is set as follows: 95°C denaturation for 10 min followed by 40 cycles of 15-s denaturation at 95°C, 1 min of annealing/extension, and data collection at 60°C.

Solubility Information

Solubility	DMSO: 135 mg/mL (246.07 mM),Sonication is recommended. Ethanol: 27.4 mg/mL (49.94 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.8227 mL	9.1136 mL	18.2272 mL
5 mM	0.3645 mL	1.8227 mL	3.6454 mL
10 mM	0.1823 mL	0.9114 mL	1.8227 mL
50 mM	0.0365 mL	0.1823 mL	0.3645 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Sasaki T, et al. Transl Respir Med. 2:8.
Liu F, Yu F, Lu Y Z, et al. Crosstalk between pleural mesothelial cell and lung fibroblast contributes to pulmonary fibrosis. Biochimica et Biophysica Acta (BBA)-Molecular Cell Research. 2020, 1867(11): 118806.
Xiao K, Liu C, Wang H, et al.Umbilical cord mesenchymal stem cells overexpressing CXCR7 facilitate treatment of ARDS-associated pulmonary fibrosis via inhibition of Notch/Jag1 mediated by the Wnt/β-catenin pathway. Biomedicine & Pharmacotherapy.2023, 165: 115124.
Zhang X, et al. Am J Cancer Res. 2015, 5(8):2344-2360.
Yosuke Osawa, et al. EBioMedicine. 2015, 2(11):1751-1758.
Wang J, Sheng N, Li Y, et al.Ly6D facilitates chemoresistance in laryngeal squamous cell carcinoma through miR-509/β-catenin signaling pathway.American Journal of Cancer Research.2023, 13(5): 2155.
Liu F, Yu F, Lu Y Z, et al. Crosstalk between pleural mesothelial cell and lung fibroblast contributes to pulmonary fibrosis[J]. Biochimica et Biophysica Acta (BBA)-Molecular Cell Research. 2020, 1867(11): 118806.
He Q, Zhang Y, Li W, et al.Inhibition of PRMT5 moderately suppresses prostate cancer growth in vivo but enhances its response to immunotherapy.Cancer Letters.2024: 217214.
Bisphenols exposure at environmentally relevant dose promoted ovarian cancer progression and modulated tumor microenvironment through β-catenin/SPP1 axis