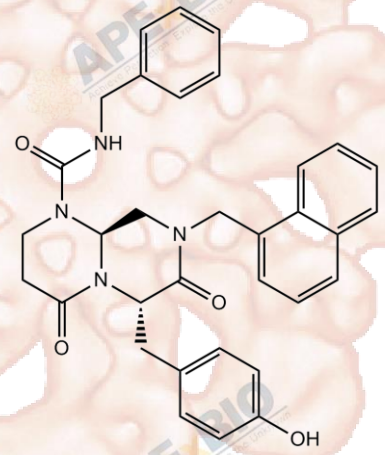
Product Data Sheet

ICG 001

Cat. No.: A8217
CAS No.: 847591-62-2
Formula: C33H32N4O4
M.Wt: 548.63
Synonyms:
Target: Stem Cell
Pathway: Wnt/β-catenin
Storage: Store at -20°C



Solvent & Solubility

In Vitro

≥27.43 mg/mL in DMSO; insoluble in H2O; ≥35.47 mg/mL in EtOH with ultrasonic

Preparing Stock Solutions

Concentration \ Mass (Solvent)	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

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary	Wnt/β-catenin pathway inhibitor
IC_{50} & Target	3 μM (CBP)

In Vitro

Cell Viability Assay

Cell Line:	Rat Epicardial Cells
Preparation method:	The solubility of this compound in DMSO is >10 mM. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months.

	Reacting conditions:	10 μM, 24 hours
	Applications:	The rat EMCs were treated with either ICG-001 or IQ1 and performed co-immunoprecipitation (co-IP) assays. Cells were treated with DMSO, ICG-001 or IQ1 for 24 hours. In the DMSO control treated cells, essentially all of the β-catenin was associated with CBP. Treatment with IQ1 had minimal effects on β-catenin coactivator usage. However, as anticipated, treatment with ICG-001 decreased the β-catenin/CBP interaction, while concomitantly increasing the β-catenin/p300 interaction.
In Vivo	**Animal experiment**	
	Animal models:	Female Sprague-Dawley rats
	Dosage form:	Subcutaneous injection, 50 mg/kg/day
	Applications:	The left coronary artery of the rats was permanently occluded via surgery to induce regional ischemic injury to the left ventricle. ICG-001 was administered to the rats beginning on the day of surgery for 10 days. Four weeks after surgery (20 days after the last ICG-001 treatment), left ventricular ejection fraction was assessed by angiography as an indicator of cardiac contractile function. ICG-001 significantly improved ejection fraction by 8.4% from 46.2±1.7% to 54.6±3.4% ($P < 0.05$). This data demonstrates that ICG-001 significantly improved cardiac contractile function after myocardial infarction in the rats.
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

1. Zhou J, Toh SH, et al. "A loss-of-function genetic screening reveals synergistic targeting ofAKT/mTOR and WTN/β-catenin pathways for treatment of AML with high PRL-3phosphatase." J Hematol Oncol. 2018 Mar 7;11(1):36.PMID:29514683

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References

[1] Sasaki T, Hwang H, Nguyen C, et al. The small molecule Wnt signaling modulator ICG-001 improves contractile function in chronically infarcted rat myocardium. PloS one, 2013, 8(9): e75010.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APExBIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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