Product Specification Sheet

**Product Name:** ICG-001  
**Catalog Number:** C4001

### Technical information:
- **Chemical Formula:** C_{33}H_{32}N_{4}O_{4}
- **CAS #:** 847591-62-2; 780757-88-2
- **Molecular Weight:** 548.63
- **Purity:** > 98%
- **Appearance:** White solid
- **Solubility:** Soluble in DMSO up to 100mM
- **Chemical Name:** (6S,9aS)-6-(4-hydroxybenzyl)-N-benzyl-8-(napthalen-1-ylmethyl)-4,7-dioxo-hexahydro-2H-pyrazino[1,2-a]pyrimidine-1(6H)-carboxamide
- **Storage:** Store solid powder at 4°C desiccated; Store DMSO solution at -20°C.
- **Shelf Life:** In the unopened package, powder is stable for 1 year and DMSO solution is stable for 6 months under proper storage condition.

### Handling:
- To make 10 mM stock solution, add 0.182mL of DMSO for each mg of ICG-001.
- For DMSO solution, briefly spin the vial at 500 rpm in a 50 mL conical tube to ensure maximum sample recovery.

### Biological Activity:
ICG-001 is a small-molecule antagonist of b-catenin/TCF-mediated transcription (IC_{50} = 3 uM) and specifically downregulates the expression of a subset of b-catenin/TCF-responsive genes. ICG-001 binds specifically to cyclic AMP response element-binding protein (CBP), thereby disrupting interaction of CBP with b-catenin. [1] ICG-001 selectively induces apoptosis in transformed, but not normal colon cells, and reduces in vitro growth of colon carcinoma cells.

ICG-001 has also been shown to attenuate bleomycin-induced lung fibrosis in mice by selective inhibition of Wnt/b-catenin-dependent transcription. [2]

ICG-001 is believed to correct defects in neuronal stem cell differentiation by inhibition of this pathway [3] and associated polytopic protein Presenilin-1 (PS-1), which suggests potential therapies in Alzheimer’s disease.

The wnt/b-catenin signalling pathway has been implicated in regulation of cancer stem cells and ICG-001 has been studied in this regard. [4]

### Reference:

To reorder: [http://www.cellagentech.com/ICG-001/](http://www.cellagentech.com/ICG-001/)

For Technical Support: [technical@cellagentech.com](mailto:technical@cellagentech.com)

*Chemicals are sold for research use only, not for clinical or diagnostic use.*