

PRODUCT INFORMATION

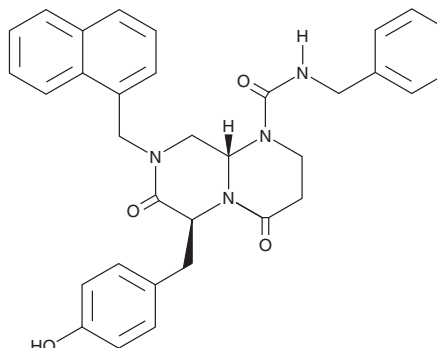


ICG-001

Item No. 16257

CAS Registry No.: 780757-88-2
Formal Name: (6S,9aS)-hexahydro-6-[(4-hydroxyphenyl)methyl]-8-(1-naphthalenylmethyl)-4,7-dioxo-N-(phenylmethyl)-2H-pyrazino[1,2-a]pyrimidine-1(6H)-carboxamide

MF: C₃₃H₃₂N₄O₄
FW: 546.6
Purity: ≥98%
UV/Vis.: λ_{max}: 224, 280 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

ICG-001 is supplied as a crystalline solid. A stock solution may be made by dissolving the ICG-001 in the solvent of choice, which should be purged with an inert gas. ICG-001 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of ICG-001 in these solvents is approximately 30 mg/ml.

ICG-001 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ICG-001 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. ICG-001 has a solubility of approximately 0.25 mg/ml in a 1:3 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

ICG-001 is a small molecule inhibitor of β-catenin/cyclic AMP responsive element binding protein (CREB) binding protein (CBP)-mediated transcription (IC₅₀ = 3 μM).¹ By binding CBP, thus blocking interaction with β-catenin, it selectively induces apoptosis in transformed colon cells, but not in normal cells, and prevents the growth of colon carcinoma cells at 25 μM *in vitro*.^{1,2} ICG-001 has been used to specifically disrupt the β-catenin pathway in studying epithelial-mesenchymal transition during pulmonary fibrosis.^{3,4} Additionally, ICG-001 disruption of Wnt/β-catenin signaling has been studied in the context of regulating cancer stem cells.⁵

References

1. Emami, K.H., Nguyen, C., Ma, H., *et al. Proc. Natl. Acad. Sci. USA* **101(34)**, 12682-12687 (2004).
2. de Sousa, E.M.F., Vermeulen, L., Richel, D., *et al. Clin. Cancer Res.* **17(4)**, 647-653 (2011).
3. Zhou, B., Liu, Y., Kahn, M., *et al. J. Biol. Chem.* **287(10)**, 7026-7038 (2012).
4. Henderson, W.R., Jr., Chi, E.Y., Ye, X., *et al. Proc. Natl. Acad. Sci. USA* **107(32)**, 14309-14314 (2010).
5. Takahashi-Yanaga, F. and Kahn, M. *Clin. Cancer Res.* **16(12)**, 3153-3162 (2010).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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