

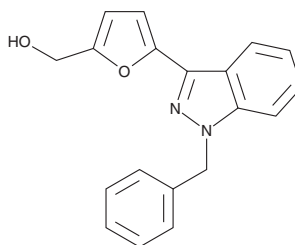
Product Information



YC-1

Catalog No. 81560

CAS Registry No.: 170632-47-0
Formal Name: 5-[1-(phenylmethyl)-1H-indazol-3-yl]-2-furanmethanol
MF: C₁₉H₁₆N₂O₂
FW: 304.3
Purity: ≥99%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid



Laboratory Procedures

For long term storage, we suggest that YC-1 be stored as supplied at -20°C. It should be stable for at least two years.

YC-1 is supplied as a crystalline solid. A stock solution may be made by dissolving the YC-1 in the solvent of choice. YC-1 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of YC-1 in these solvents is approximately 20 mg/ml.

YC-1 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, YC-1 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. YC-1 has a solubility of approximately 10 µg/ml in a 5:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

YC-1 is a nitric oxide (NO) independent activator of soluble guanylyl cyclase (sGC). YC-1 inhibits collagen (10 µg/ml) and thrombin (0.1 U/ml) induced platelet aggregation with IC₅₀ values of 11.7-14.6, and 57.3-59.3 µM, respectively.^{1,2} In the absence of NO or carbon dioxide (CO), 200 µM YC-1 increases the activity of purified sGC 12-fold, with an ED₅₀ value of 20 µM.³ At a concentration of 200 µM, YC-1 potentiates the maximal activity of sGC in the presence of NO or CO by 40% and >3,000%, respectively.

References

1. Wu, C.-C., Ko, F.-N., Kuo, S.-C., *et al.* YC-1 inhibited human platelet aggregation through NO-independent activation of soluble guanylate cyclase. *Br. J. Pharmacol.* **116**, 1973-1978 (1995).
2. Ko, F.-N., Wu, C.-C., Kuo, S.-C., *et al.* YC-1, a novel activator of platelet guanylate cyclase. *Blood* **84**, 4226-4233 (1994).
3. Friebe, A., Schultz, G., and Koesling, D. Sensitizing soluble guanylyl cyclase to become a highly CO-sensitive enzyme. *EMBO J.* **15**, 6863-6868 (1996).

Related Products

LY83583 - Cat. No. 70230 • ODQ - Cat. No. 81410 • NS-2028 - Cat. No. 81600 • Guanylate Cyclase (soluble) Polyclonal Antiserum - Cat. No. 160890

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WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent via email to your institution.

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