

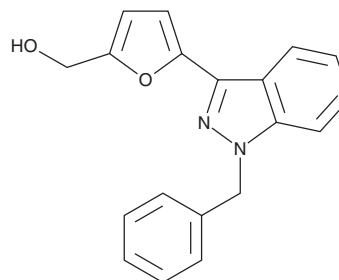
PRODUCT INFORMATION



YC-1

Item 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%
UV/Vis.: λ_{max}: 225, 253, 278, 287, 326 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

YC-1 is supplied as a crystalline solid. A stock solution may be made by dissolving the YC-1 in the solvent of choice, which should be purged with an inert gas. YC-1 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. 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 0.01 mg/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.

Description

YC-1 is an nitric oxide (NO)-independent activator of soluble guanylyl cyclase. It 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 monoxide (CO), 200 µM YC-1 increases the activity of purified soluble guanylyl cyclase 12-fold, with an ED₅₀ value of 20 µM.³ At a concentration of 200 µM, YC-1 potentiates the maximal activity of soluble guanylyl cyclase 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**(3), 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**(12), 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**(24), 6863-6868 (1996).

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.

WARRANTY AND LIMITATION OF REMEDY
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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM