



LKT Laboratories, Inc.

YC-1

Phone: 888-558-5227  
651-644-8424  
Fax: 888-558-7329  
Email: [getinfo@lktlabs.com](mailto:getinfo@lktlabs.com)  
Web: [lktlabs.com](http://lktlabs.com)

## Product Information

Product ID Y0800

CAS No. 170632-47-0

Chemical Name [5-(1-Benzyl-1H-indazol-3-yl)-2-furyl]methanol

Synonym 3-(5'-Hydroxymethyl-2'-furyl)-1-benzylindazole

Formula  $C_{19}H_{16}N_2O_2$

Formula Wt. 304.35

Melting Point

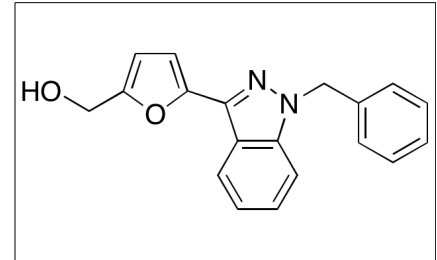
Purity  $\geq 98\%$

Solubility Soluble in DMSO, methanol  
or dichloromethane.

Store Temp  $-20^{\circ}C$

Ship Temp Ambient

**Description** YC-1 is a guanylyl cyclase activator and HIF-1 $\alpha$  inhibitor. YC-1 displays anti-fibrotic, anticancer chemotherapeutic, anti-atherosclerotic, and neuroprotective activities. In vitro, YC-1 decreases secretion of sENG and sFlt-1, reversing endothelial dysfunction. In hepatic stellate cells, this compound decreases cell viability and increases apoptosis, potentially through suppressing expression of  $\alpha$ SMA. In canine lymphoma cells, YC-1 inhibits cell proliferation; in similar animal models, it induces tumor regression. In other animal models, YC-1 decreases ox-LDL-induced cholesterol accumulation. Additionally, this compound suppresses neuronal death induced by amyloid-B (AB) peptides.



## Pricing and Availability

*Bulk quantities available upon request*

Product ID	Size	List Price
Y0800	1 mg	\$34.80
Y0800	5 mg	\$112.80
Y0800	25 mg	\$451.00

**References** Brownfoot FC, Tong S, Hannan NJ, et al. YC-1 reduces placental sFlt-1 and soluble endoglin production and decreases endothelial dysfunction: A possible therapeutic for preeclampsia. *Mol Cell Endocrinol.* 2015 Sep 15;413:202-8. PMID: 26159901.

Xiao J, Jin C, Liu Z, et al. The design, synthesis, and biological evaluation of novel YC-1 derivatives as potent anti-hepatic fibrosis agents. *Org Biomol Chem.* 2015 Jul 14;13(26):7257-64. PMID: 26055070.

Kabayashi S, Igase M, Kobayashi K, et al. Hypoxia inducible factor 1 $\alpha$  expression and effects of its inhibitors in canine lymphoma. *J Vet Med Sci.* 2015 Jun 6. [Epub ahead of print]. PMID: 26050843.

Tsou CY, Chen CY, Zhao JF, et al. Activation of soluble guanylyl cyclase prevents foam cell formation and atherosclerosis. *Acta Physiol (Oxf).* 2014 Apr;210(4):799-810. PMID: 24299003.

Purohit R, Fritz BG, The J, et al. YC-1 binding to the  $\beta$  subunit of soluble guanylyl cyclase overcomes allosteric inhibition by the  $\alpha$  subunit. *Biochemistry.* 2014 Jan 14;53(1):101-14. PMID: 24328155.

Tsai YC, Lee YM, Lam KK, et al. The role of heat shock protein 70 in the protective effect of YC-1 on  $\beta$ -amyloid-induced toxicity in differentiated PC12 cells. *PLoS One.* 2013 Jul 26;8(7):e69320. PMID: 23922702.

**Caution:** This product is intended for laboratory and research use only. It is not for human or drug use.