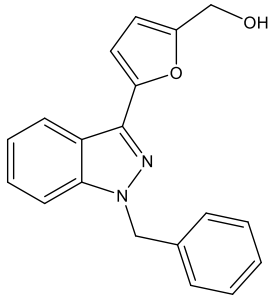
Catalog # 10-1581

YC-1

CAS# 170632-47-0

3-(5'-Hydroxymethyl-2'-furyl)-1-benzylindazole ; Lificiguat

Lot # X103724



Nitric oxide-independent activator of soluble guanylyl cyclase (sGC). Significantly elevates cGMP levels and inhibits collagen-stimulated aggregation of rabbit platelets (IC_{50} = 14.6 µM).[1] Induces human endometrial cancer cell senescence via modulation of HIF1α activity.[2] Induces degradation of HIF1α.[3] Protects against glutamate-induced neuronal damage[4] and β-amyloid-induced toxicity in differentiated PC12 cells[5].

1) Martin *et al*. (2001), *YC-1 activation of human soluble guanylyl cyclase has both heme-dependent and heme-independent components*; Proc. Natl. Acad. Sci. USA, **98** 12938
2) Kato *et al*. (2006), *Induction of human endometrial cancer cell senescence through modulation of HIF-1alpha activity by EGLN1*; Int. J. Cancer, **118** 1144
3) Kim *et al*. (2006), *A domain responsible for HIF-1alpha degradation by YC-1, a novel anticancer agent*; Int. J. Oncol., **29** 255
4) Tai *et al*. (2018), *Therapeutic window for YC-1 following glutamate-induced neuronal damage and transient focal cerebral ischemia*; Mol. Med. Rep., **17** 6490
5) Tsai *et al*. (2013), *The role of heat shock protein 70 in the protective effect of YC-1 on ß-amyloid-induced toxicity in differentiated PC12 cells.*; PLoS One, **8(7)** e69320

PHYSICAL DATA

Molecular Weight:	304.34
Molecular Formula:	$C_{19}H_{16}N_2O_2$
Purity:	98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (up to 35 mg/ml) or Ethanol (up to 15 mg/ml)
Physical Description:	Pink solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 3 months.

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