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).\textsuperscript{1} Induces human endometrial cancer cell senescence via modulation of HIF1α activity.\textsuperscript{2} Induces degradation of HIF1α.\textsuperscript{3} Protects against glutamate-induced neuronal damage\textsuperscript{4} and β-amyloid-induced toxicity in differentiated PC12 cells\textsuperscript{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 β-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$_{2}$O$_{2}$
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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