# PRODUCT INFORMATION

## YH-306

*Item No. 41874*

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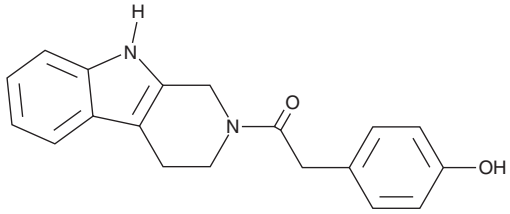
| **CAS Registry No.:** | 1373764-75-0 |
| **Formal Name:** | 2-(4-hydroxyphenyl)-1-(1,3,4,9-tetrahydro-2H-pyrido[3,4-b]indol-2-yl)-ethanone |
| **MF:** | $C_{19}H_{18}N_2O_2$ |
| **FW:** | 306.4 |
| **Purity:** | ≥98% |
| **Supplied as:** | A solid |
| **Storage:** | -20°C |
| **Stability:** | ≥4 years |




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

### Laboratory Procedures

YH-306 is supplied as a solid. A stock solution may be made by dissolving the YH-306 in the solvent of choice, which should be purged with an inert gas. YH-306 is soluble (≥10 mg/ml) in DMSO.

### Description

YH-306 is an anticancer agent.[1] It reduces TGF-β-induced transcriptional activity by 72.4% in a reporter assay using HaCaT cells when used at a concentration of 1 µM. YH-306 inhibits the proliferation of PC-9, H1299, and A549 lung cancer cells ($IC_{50}$s = 5.87, 8.07, and 7.9 µM, respectively). It decreases migration of H1299 cells in a wound healing assay when used at concentrations of 0.1, 0.5, or 1 µM. YH-306 (50 µM) inhibits actin polymerization in HT-29 colon cancer cells.[2] It inhibits fibronectin-induced increases in the levels of matrix metalloproteinase-2 (MMP-2), MMP-9, and phosphorylated focal adhesion kinase (FAK), PI3K, and ERK in CT26 colon cancer cells when used at a concentration of 50 µM. YH-306 (5 mg/kg per day) decreases tumor volume without reducing body weight in an A549 mouse xenograft model.[1] It also reduces tumor growth and the number of hepatic metastases in a CT26-luc colon cancer mouse xenograft model with hepatic metastases when administered at a dose of 50 mg/kg per day.[2]

### References


1. Zheng, C., Fang, Y., Tong, W., *et al.* Synthesis and biological evaluation of novel tetrahydro-β-carboline derivatives as antitumor growth and metastasis agents through inhibiting the transforming growth factor-β signaling pathway. *J. Med. Chem.* **57(3)**, 600-612 (2014).
2. Dai, F., Chen, Y., Huang, L., *et al.* A novel synthetic small molecule YH-306 suppresses colorectal tumour growth and metastasis *via* FAK pathway. *J. Cell. Mol. Med.* **19(2)**, 383-395 (2015).





**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