

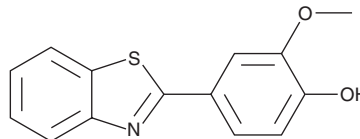
PRODUCT INFORMATION



YL-109

Item No. 30290

CAS Registry No.: 36341-25-0
Formal Name: 4-(2-benzothiazolyl)-2-methoxy-phenol
MF: $C_{14}H_{11}NO_2S$
FW: 257.3
Purity: $\geq 98\%$
UV/Vis.: λ_{max} : 220, 327 nm
Supplied as: A crystalline solid
Storage: $-20^{\circ}C$
Stability: ≥ 4 years



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

Laboratory Procedures

YL-109 is supplied as a crystalline solid. A stock solution may be made by dissolving the YL-109 in the solvent of choice, which should be purged with an inert gas. YL-109 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of YL-109 in these solvents is approximately 1 mg/ml in ethanol and 30 mg/ml in DMSO and DMF.

YL-109 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, YL-109 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. YL-109 has a solubility of approximately 0.1 mg/ml in a 1:9 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

YL-109 is an anticancer agent.¹ It inhibits the proliferation of MCF-7 and MDA-MB-231 cells (IC_{50} s = 0.0858 and 4.2 μM , respectively), as well as migration and invasion by MDA-MB-231 cells *in vitro*. It induces expression of carboxyl terminus of Hsp70-interacting protein (CHIP) in MDA-MB-231 cells in an AHR-dependent manner. YL-109 (1 μM) inhibits MDA-MB-231-derived cancer stem cell (CSC) mammosphere formation. *In vivo*, YL-109 (15 mg/kg) reduces tumor volume and the number of metastases in an MDA-MB-231 mouse xenograft model.

Reference

1. Hiyoshi, H., Gato, N., Tsuchiya, M., *et al.* 2-(4-Hydroxy-3-methoxyphenyl)-benzothiazole suppresses tumor progression and metastatic potential of breast cancer cells by inducing ubiquitin ligase CHIP. *Sci. Rep.* **4:7095** (2014).

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.

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