

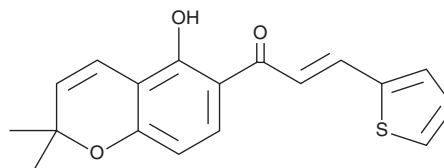
# PRODUCT INFORMATION



## SYP-5

Item No. 33791

**CAS Registry No.:** 1384268-04-5  
**Formal Name:** (2E)-1-(5-hydroxy-2,2-dimethyl-2H-1-benzopyran-6-yl)-3-(2-thienyl)-2-propen-1-one  
**MF:** C<sub>18</sub>H<sub>16</sub>O<sub>3</sub>S  
**FW:** 312.4  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 233, 283, 369 nm  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥2 years



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

### Laboratory Procedures

SYP-5 is supplied as a solid. A stock solution may be made by dissolving the SYP-5 in the solvent of choice, which should be purged with an inert gas. SYP-5 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of SYP-5 in these solvents is approximately 1, 25, and 30 mg/ml, respectively.

SYP-5 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, SYP-5 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. SYP-5 has a solubility of approximately 0.3 mg/ml in a 1:2 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

SYP-5 is an inhibitor of hypoxia-inducible factor-1 (HIF-1).<sup>1</sup> It inhibits HIF-1 activity in a reporter assay when used at concentrations ranging from 0.1 to 100 μM. SYP-5 (2, 10, and 50 μM) reduces hypoxia- or VEGF-induced capillary tube formation in human umbilical vein endothelial cells (HUVECs). It inhibits the migration and invasion of Hep3B hepatocellular carcinoma and BCaP-37 breast cancer cells in a concentration-dependent manner.

### Reference

1. Wang, L.-H., Jiang, X.-R., Yang, J.-Y., *et al.* SYP-5, a novel HIF-1 inhibitor, suppresses tumor cells invasion and angiogenesis. *Eur. J. Pharmacol.* **791**, 560-568 (2016).

#### 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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