

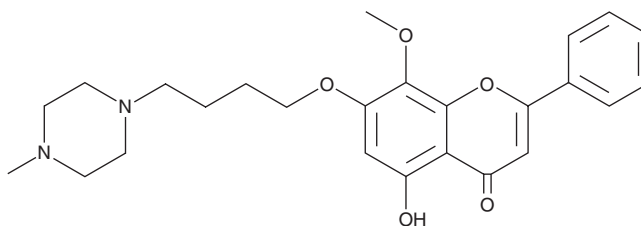
PRODUCT INFORMATION



LYG-202

Item No. 21976

CAS Registry No.: 1175077-25-4
Formal Name: 5-hydroxy-8-methoxy-7-[4-(4-methyl-1-piperazinyl)butoxy]-2-phenyl-4H-1-benzopyran-4-one
MF: C₂₅H₃₀N₂O₅
FW: 438.5
Purity: ≥98%
UV/Vis.: λ_{max}: 276 nm
Supplied as: A crystalline 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

LYG-202 is supplied as a crystalline solid. A stock solution may be made by dissolving the LYG-202 in the solvent of choice, which should be purged with an inert gas. LYG-202 is soluble in organic solvents such as ethanol and dimethyl formamide (DMF). The solubility of LYG-202 in these solvents is approximately 2.5 and 14 mg/ml, respectively.

LYG-202 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, LYG-202 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. LYG-202 has a solubility of approximately 0.12 mg/ml in a 1:40 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

LYG-202 is a synthetic flavonoid with anticancer and anti-angiogenic activities.^{1,2} It inhibits proliferation of HepG2, MCF-7, HeLa, BGC-823, MDA-MB-435, and HCT116 cancer cells *in vitro* (IC₅₀s = 4.74-27.70 μM) via induction of apoptosis and dissipation of the mitochondrial membrane potential.¹ LYG-202 reduces tumor growth in S180 sarcoma cell-inoculated mice. It also inhibits VEGF-stimulated human umbilical vein endothelial cell (HUVEC) migration and tube formation *in vitro* and decreases capillary sprouting in isolated rat aortic rings and the chicken chorioallantoic membrane (CAM) model of angiogenesis.²

References

1. Zeng, S., Liu, W., Nie, F.-f., et al. LYG-202, a new flavonoid with a piperazine substitution, shows antitumor effects *in vivo* and *in vitro*. *Biochem. Biophys. Res. Commun.* **385(4)**, 551-556 (2009).
2. Chen, Y., Lu, N., Ling, Y., et al. LYG-202, a newly synthesized flavonoid, exhibits potent anti-angiogenic activity *in vitro* and *in vivo*. *J. Pharmacol. Sci.* **112(1)**, 37-45 (2010).

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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