**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: C_{25}H_{30}N_{2}O_{5}  
FW: 438.5  
Purity: ≥98%  
UV/Vis.: \( \lambda_{\text{max}} \): 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 (IC\(_{50}\)s = 4.74-27.70 \(\mu\)M) 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**