# **PRODUCT** INFORMATION



## Ligustroflavone

Item No. 27431

	CAS Registry No.: Formal Name:	7-[(O-6-deoxy- $\alpha$ -L-mannopyranosyl- (1 $\rightarrow$ 2)-O-[6-deoxy- $\alpha$ -L-mannopyranosyl- (1 $\rightarrow$ 6)]- $\beta$ -D-glucopyranosyl)oxy]-5- hydroxy-2-(4-hydroxyphenyl)-4H-1- benzopyran-4-one	
Mr. $C_{33} \Gamma_{40} O_{18}$			
FW: 724.7		· = ···	OH O
<b>Purity:</b> ≥98%	,		0
UV/Vis.: $λ_{max}$ : 270, 337 nm HO	UV/Vis.:	λ <sub>max</sub> : 270, 337 nm	HO
Supplied as: A crystalline solid	Supplied as:	A crystalline solid	
Storage: -20°C	Storage:	-20°C	HO
Stability: ≥4 years	Stability:	≥4 years	
Item Origin: Plant/Turpinia arguta Seem.	Item Origin:	Plant/Turpinia arguta Seem.	OH

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

### Laboratory Procedures

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

Ligustroflavone is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, ligustroflavone should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Ligustroflavone has a solubility of approximately 0.16 mg/ml in a 1:5 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

#### Description

Ligustroflavone is an apigenin triglycoside originally isolated from L. vulgare that has diverse biological activities.<sup>1</sup> It increases parathyroid hormone (PTH) release from rat primary parathyroid gland cells when used at a concentration of 1  $\mu$ M and inhibits calcium influx in HEK293 cells.<sup>2</sup> It increases serum PTH, as well as serum and bone calcium levels, in a streptozotocin-induced mouse model of diabetes with osteoporosis when administered at doses of 5 and 20 mg/kg three times per week. It also reduces increases in the expression and levels of the extracellular calcium sensing receptor (CaSR) in the kidney of diabetic osteoporotic mice. Ligustroflavone (10, 30, and 60 mg/kg) decreases infarct volume in a rat model of ischemic stroke and decreases the levels of the necroptosis-associated proteins RIPK3 and MLKL in the brain of ischemic rats when administered at a dose of 30 mg/kg.<sup>3</sup>

#### References

- 1. Pieroni, A. and Pachaly, P. Pharmazie 55(1), 78-80 (2000).
- 2. Feng, R., Ding, F., Mi, X.-H., et al. Am. J. Chin. Med. 47(2), 457-476 (2019).
- 3. Zhang, Y.-Y., Liu, W.-N., Li, Y.-Q., et al. Naunyn Schmiedebergs Arch. Pharmacol. 392(9), 1085-1095 (2019).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFFTY 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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