

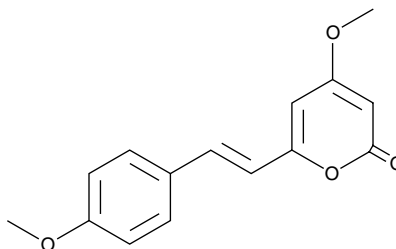
# Product Information



## Yangonin

Item No. 14351

**CAS Registry No.:** 500-62-9  
**Formal Name:** 4-methoxy-6-[(1E)-2-(4-methoxyphenyl)ethenyl]-2H-pyran-2-one  
**MF:** 258.3  
**FW:** C<sub>15</sub>H<sub>14</sub>O<sub>4</sub>  
**Purity:** ≥98%  
**Stability:** ≥2 years at -20°C  
**Supplied as:** A crystalline solid  
**UV/Vis.:** λ<sub>max</sub>: 218, 267, 357 nm



### Laboratory Procedures

For long term storage, we suggest that yangonin be stored as supplied at -20°C. It should be stable for at least two years. Yangonin is supplied as a crystalline solid. A stock solution may be made by dissolving the yangonin in the solvent of choice. Yangonin is soluble in organic solvents such as DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of yangonin in these solvents is approximately 5 mg/ml.

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

Yangonin is a natural kavalactone from the kava plant, *P. methysticum*. It enhances the binding of bicuculline at the γ-amino butyric acid (GABA) receptor GABA<sub>A</sub> at 1.0 μM.<sup>1</sup> Yangonin also binds the central cannabinoid (CB<sub>1</sub>) receptor with a K<sub>i</sub> value of 0.72 μM, but whether it serves as an agonist or antagonist at this receptor remains to be determined.<sup>2</sup> Yangonin also blocks the activation of NF-κB by TNF-α.<sup>3</sup> This product is intended for forensic and research applications.

### References

1. Boonen, G. and Häberlein, H. Influence of genuine kavapyrone enantiomers on the GABA<sub>A</sub> binding site. *Planta Med.* **64**(6), 504-506 (1998).
2. Ligresti, A., Villano, R., Allarà, M., *et al.* Kavalactones and the endocannabinoid system: The plant-derived yangonin is a novel CB<sub>1</sub> receptor ligand. *Pharmacol. Res.* **66**(2), 163-169 (2012).
3. Ma, J., Liang, H., Jin, H.R., *et al.* Yangonin blocks tumor necrosis factor-α-induced nuclear factor-κB-dependent transcription by inhibiting the transactivation potential of the RelA/p65 subunit. *J. Pharmacol. Sci.* **118**(4), 447-454 (2012).

### Related Products

For a list of related products please visit: [www.caymanchem.com/catalog/14351](http://www.caymanchem.com/catalog/14351)

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**WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

#### SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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