

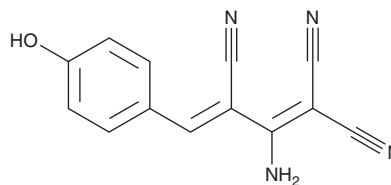
# PRODUCT INFORMATION



## AG-112

Item No. 45208

**CAS Registry No.:** 144978-82-5  
**Formal Name:** 2-amino-3-[(4-hydroxyphenyl)methylene]-1-propene-1,1,3-tricarbonitrile  
**MF:** C<sub>13</sub>H<sub>8</sub>N<sub>4</sub>O  
**FW:** 236.2  
**Purity:** ≥95%  
**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

AG-112 is supplied as a crystalline solid. A stock solution may be made by dissolving the AG-112 in the solvent of choice, which should be purged with an inert gas. AG-112 is sparingly soluble (1-10 mg/ml) in ethanol and DMSO.

### Description

AG-112 is an EGFR inhibitor.<sup>1</sup> It inhibits EGFR-catalyzed phosphorylation of poly(GAT) in a cell-free assay (IC<sub>50</sub> = 0.125 μM). AG-112 also inhibits calcineurin phosphatase activity in a cell-free assay (IC<sub>50</sub> = 30 μM).<sup>2</sup> AG-112 inhibits diabetes-induced growth of vascular smooth muscle cells (VSMCs) isolated from type 2 diabetic rats and reduces diabetes-induced increases in superoxide generation and NADPH oxidase activity in the same cells.<sup>3</sup>

### References

1. Gazit, A., Yaish, P., Gilon, C., *et al.* Tyrphostins I: Synthesis and biological activity of protein tyrosine kinase inhibitors. *J. Med. Chem.* **32**(10), 2344-2352 (1989).
2. Martin, B.L. Inhibition of calcineurin by the tyrphostin class of tyrosine kinase inhibitors. *Biochem. Pharmacol.* **56**(4), 483-488 (1998).
3. Jeong, H.Y., Son, S.M., Kim, Y.K., *et al.* Tyrosine kinase-mediated activation of NADPH oxidase enhances proliferative capacity of diabetic vascular smooth muscle cells. *Life Sci.* **76**(15), 1747-1757 (2005).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 03/09/2026

#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897

[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM