

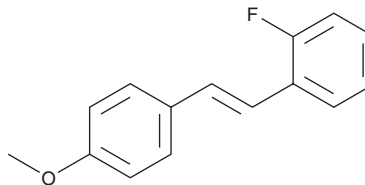
# PRODUCT INFORMATION



## CAY10512

Item No. 10009536

**CAS Registry No.:** 139141-12-1  
**Formal Name:** 1-fluoro-2-[2-(4-methoxyphenyl)ethenyl]-benzene  
**MF:** C<sub>15</sub>H<sub>13</sub>FO  
**FW:** 228.3  
**Purity:** ≥97%  
**UV/Vis.:** λ<sub>max</sub>: 229, 318 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

CAY10512 is supplied as a crystalline solid. A stock solution may be made by dissolving the CAY10512 in the solvent of choice, which should be purged with an inert gas. CAY10512 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of CAY10512 in these solvents is approximately 0.5, 2, and 3 mg/ml, respectively.

CAY10512 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CAY10512 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. CAY10512 has a solubility of approximately 0.3 mg/ml in a 1:2 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

The nuclear factor-κB (NF-κB) regulates the expression of numerous genes involved in immunity and inflammation, cellular stress responses, growth, and apoptosis. Resveratrol, a polyphenolic *trans*-stilbene, is a known inhibitor of the activation of NF-κB and exhibits activity against a wide variety of cancer cells. CAY10512 is a substituted *trans*-stilbene analog of resveratrol that is 100-fold more potent as measured by antioxidant activity. The IC<sub>50</sub> value for inhibition of TNF-α-induced activation of NF-κB by CAY10512 is 0.15 μM compared to 20 μM by resveratrol.<sup>1</sup>

### Reference

1. Heynekamp, J.J., Weber, W.M., Hunsaker, L.A., *et al.* Substituted *trans*-stilbenes, including analogues of the natural product resveratrol, inhibit the human tumor necrosis factor α-induced activation of transcription factor nuclear factor κB. *J. Med. Chem.* **49**(24), 7182-7189 (2006).

#### 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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