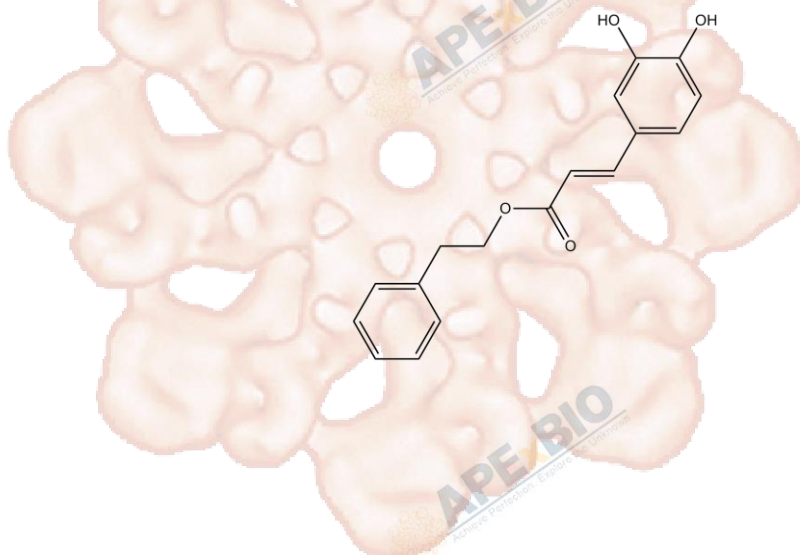


## Product Data Sheet

### Caffeic Acid Phenethyl Ester

<b>Cat. No.:</b>	B1644
<b>CAS No.:</b>	104594-70-9
<b>Formula:</b>	C17H16O4
<b>M.Wt:</b>	284.31
<b>Synonyms:</b>	
<b>Target:</b>	Immunology/Inflammation
<b>Pathway:</b>	NF-κB
<b>Storage:</b>	Store at -20°C



### Solvent & Solubility

≥28.4 mg/mL in DMSO; insoluble in H<sub>2</sub>O; ≥108.6 mg/mL in EtOH

In Vitro

Preparing Stock Solutions	Solvent	Mass		
		1mg	5mg	10mg
	<b>Concentration</b>			
	<b>1 mM</b>	3.5173 mL	17.5864 mL	35.1729 mL
	<b>5 mM</b>	0.7035 mL	3.5173 mL	7.0346 mL
	<b>10 mM</b>	0.3517 mL	1.7586 mL	3.5173 mL

Please refer to the solubility information to select the appropriate solvent.

### Biological Activity

Shortsummary

NF-κB activation inhibitor

IC<sub>50</sub> & Target

In Vitro

#### Cell Viability Assay

Cell Line:	The human histiocytic cell line U937 cells
Preparation method:	The solubility of this compound in DMSO is >10 mM. General tips for obtaining a higher concentration: Please warm the tube at 37°C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.
Reacting conditions:	0, 5, 10, 15, 25 and 30 µg/ml; 2 h

	Applications:	In U937 cells, Caffeic Acid Phenethyl Ester (CAPE) inhibited the TNF-dependent activation of NF-KB in a dose-dependent manner, with maximum effect occurring at 25 ug/ml. CAPE (25 ug/ml) also blocked NF-KB activation induced by Phorbol Ester, Ceramide, Okadaic Acid, and Hydrogen Peroxide.
In Vivo	<b>Animal experiment</b>	
	Animal models:	CT26-bearing BALB/c male mice with pulmonary metastases
	Dosage form:	10 mg/kg/day, intraperitoneal injection
	Applications:	In CT26-bearing BALB/c male mice with pulmonary metastases, CAPE decreased tumor colonization in the lung. Mice treated with CAPE survived longer than untreated controls. CAPE reduced plasma VEGF levels by 53.2%.
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

## Product Citations

See more customer validations on [www.apexbt.com](http://www.apexbt.com).

## References

- [1] Natarajan K, Singh S, Burke TR Jr, Grunberger D, Aggarwal BB. Caffeic acid phenethyl ester is a potent and specific inhibitor of activation of nuclear transcription factor NF-kappa B. Proc Natl Acad Sci U S A. 1996 Aug 2;93(17):9090-5.
- [2] Liao HF, Chen YY, Liu JJ, Hsu ML, Shieh HJ, Liao HJ, Shieh CJ, Shiao MS, Chen YJ. Inhibitory effect of caffeic acid phenethyl ester on angiogenesis, tumor invasion, and metastasis. J Agric Food Chem. 2003 Dec 31;51(27):7907-12.

## Caution

**FOR RESEARCH PURPOSES ONLY.**

**NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

Specific storage and handling information for each product is indicated on the product datasheet. Most APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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**APEX BIO Technology**

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