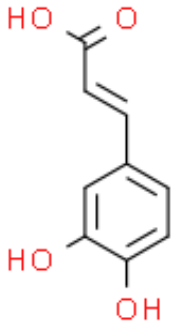
Product Data Sheet

Cas No.:	331-39-5	Cat. No:	PC58300
Product Name:	Caffeic acid		
Product synonym:	3,4-二羟基肉桂酸;3-(3,4-二羟苯基)-2-丙烯酸;3,4-二羟基苯丙烯酸;β-(3,4-二羟苯基)丙烯酸;3-（3,4-二羟基苯基）丙烯酸;水解咖啡鞣酸;3,4-二羟桂皮酸;3,4-二羟基苯乙烯酸;二羟基桂皮酸;甲萘氢醌二磷酸酯钠;咖啡酸 标准品;咖啡酸(RG);咖啡酸（标准品）;咖啡酸, 反式为主;咖啡酸 植物提取物,标准品,对照品;咖啡酸,分析标准品;小柴胡提取物;咖啡酸;水解咖啡鞣酸,3,4-二羟基肉桂酸;咖啡酸 ;(E)-3,4-二羟基肉桂酸;咖啡酸(3,4-二羟基肉桂酸)		
Chemical name:	Caffeic acid		
MF:	C9H8O4	FW:	180.1574
Purity:	≥99%	Batch No.:	-
Storage:			
Structural formula:			
λmax:	-	Formulation:	-
Solubility :			
SMILES :	O=C(O)/C=C/C1=CC=C(O)C(O)=C1		
InChI Code:	-		
InChI Key:			
WARNING This product is not for human or veterinary use.			

Product Description

Caffeic acid 是 TRPV1 离子通道和 5-脂氧合酶 (5-LO) 的抑制剂。Caffeic acid 是 TRPV1 离子通道和 5-脂氧合酶 (5-LO) 的抑制剂。

生物活性	Caffeic acid is an inhibitor of both TRPV1 ion channel and 5-Lipoxygenase (5-LO).
IC50 & Target[1][2]	5-LO

体外研究(In Vitro)	Caffeic acid has inhibitory effects on histamine-induced responses and the inhibitory effect of Caffeic acid is gradually increased when the concentration used for pretreatment is increased from 0.1 to 1 mM, similar to typical dose-dependent responses. Pretreatment of HEK293T-TRPV1 cells with 1 mM Caffeic acid results in significant inhibition of capsaicin-induced responses. When lower concentration of Caffeic acid is used, the inhibitory effect for capsaicin-induced responses is less evident. Calcium imaging experiments show that Caffeic acid incubation results in significant inhibition in histamine-sensitive dorsal root ganglion (DRG) neurons. Pretreatment with Caffeic acid (1 mM) results in a significant decrease in the percentage of responsive DRG neurons to histamine application from 12.5% to 2.1%. Pretreatment with 1 mM Caffeic acid dramatically blocks the allylisothiocy
体内研究(In Vivo)	Mice pretreated with Caffeic acid (500 mg/kg) exhibit significantly less histamine-induced scratching (30.50±10.87 bouts/1 h, n=6). It is further found that the lower dose of Caffeic acid (100 mg/kg) is not significantly effective in terms of anti-scratching effects in histamine-induced scratching, although there appears to be a tendency of reduction (49.40±12.35 bouts/1 h, n=5). The chloroquine induced scratching is significantly inhibited by pretreatment with 500 mg/kg of Caffeic acid (161.6±31.42 bouts/1 h, n=5).Caffeic acid significantly reduces the expression of 5-LO mRNA (P<0.01) dose-dependently in hippocampus. Compare with the ischemia-reperfusion (I/R) non-treated group, 5-LO protein expression is significantly reduced in the I/R-Caffeic acid group (P<0.05 or P<0.01), especially in the I/R-Caffeic acid group (50 mg/kg). Compare with the I/R non-treated group,
包装储存	Powder： -20°C； 3 years; 4°C； 2 years
溶解度数据	体外研究: DMSO : 100 mg/mL(555.06 mM;Need ultrasonic) H2O : < 0.1 mg/mL (ultrasonic) (insoluble) 配制储存液