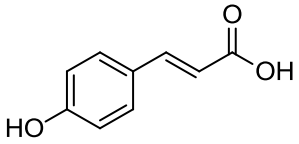
bioaustralis
fine chemicals

PRODUCT DATA SHEET

p-Coumaric acid

Code No.: **BIA-C1726**

Pack sizes: **5 mg, 25 mg**



Synonyms : 4-Coumaric acid; 4-Hydroxycinnamic acid; 4'-Hydroxycinnamic acid; NSC 59260; NSC 674321; p-Cumaric acid; p-Hydroxycinnamic acid; p-Hydroxyphenylacrylic acid; b-[4-Hydroxyphenyl]acrylic acid

Specifications

CAS #	:	**7400-08-0**
Molecular Formula	:	**$C_9H_8O_3$**
Molecular Weight	:	**164.2**
Source	:	**Synthetic**
Appearance	:	**White solid**
Purity	:	**>95% by HPLC**
Long Term Storage	:	**-20°C**
Solubility	:	**Soluble in ethanol, methanol, DMF or DMSO.**

Application Notes

p-Coumaric acid is a common plant metabolite, biosynthetically formed by the action of tyrosine ammonia-lyase (TAL) on phenylalanine. p-Coumaric acid is a member of the phenylpropanoid class of lignin biosynthetic precursors. p-Coumaric acid is readily produced by fermentation on media containing plant extracts. The biochemical and pharmacological activity of p-coumaric acid has > 10,000 SciFinder entries and the area is well reviewed by Guzman (2014) and Sharma (2011). p-Coumaric acid a useful standard for analytical and bioassay dereplication.

References

1. Metabolomics-guided analysis of isocoumarin production by Streptomyces species MBT76 and biotransformation of flavonoids and phenylpropanoids. Wu C. et al., Metabolomics 2016, 12, 1.
2. Expanding the chemical space for natural products by Aspergillus-Streptomyces co-cultivation and biotransformation. Wu C. et al., Scientific Reports 2015, 5, 10868.
3. p-Hydroxycinnamic acid production directly from cellulose using endoglucanase- and tyrosine ammonia lyase-expressing Streptomyces lividans. Kawai Y. et al., Microbial Cell Factories 2013, 12, 45.
4. Natural cinnamic acids, synthetic derivatives and hybrids with antimicrobial activity. Guzman J.D., Molecules 2014, 19, 19292.
5. Cinnamic acid derivatives: A new chapter of various pharmacological activities. Sharma P., J. Chem. Pharm. Res. 2011, 3, 403.

Updated: 24 May 2019

Building C, 28-54 Percival Road, Smithfield, NSW 2164, AUSTRALIA

Tel: 61 2 9757 4515 Fax: 61 2 9757 2586 Web: www.bioaustralis.com Email: info@bioaustralis.com