

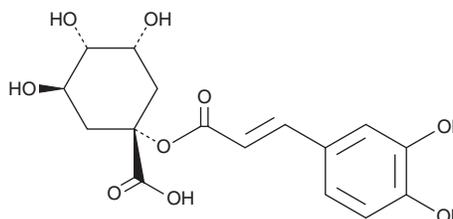
PRODUCT INFORMATION



1-O-Caffeoylquinic Acid

Item No. 36189

CAS Registry No.: 1241-87-8
Formal Name: (1 α ,3R,4 α ,5R)-1-[[3-(3,4-dihydroxyphenyl)-1-oxo-2-propen-1-yl]oxy]-3,4,5-trihydroxy-cyclohexanecarboxylic acid
Synonyms: 1-Caffeoylquinic Acid, 1-CQA
MF: C₁₆H₁₈O₉
FW: 354.3
Purity: \geq 98%
UV/Vis.: λ_{max} : 220, 247, 333 nm
Supplied as: A solid
Storage: -20°C
Stability: \geq 4 years
Item Origin: Plant/*Lonicera japonica*



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

1-O-Caffeoylquinic acid is supplied as a solid. A stock solution may be made by dissolving the 1-O-caffeoylquinic acid in the solvent of choice, which should be purged with an inert gas. 1-O-Caffeoylquinic acid is soluble in acetone, chloroform, dichloromethane, ethyl acetate, and DMSO.

Description

1-O-Caffeoylquinic acid is a phenolic acid that has been found in *C. scolymus*.¹ It binds to the NF- κ B precursor protein p105 ($K_i = 0.007 \mu\text{M}$).² 1-O-Caffeoylquinic acid also binds programmed cell death protein 1 (PD-1; $K_D = 12.4 \mu\text{M}$) and inhibits the protein-protein interaction between PD-1 and PD ligand 1 (PD-L1; $IC_{50} = 87.28 \mu\text{M}$).³

References

1. Lattanzio, V., Cadinali, A., Venere, D.D., *et al.* Browning phenomena in stored artichoke (*Cynara scolymus* L.) heads: Enzymic or chemical reactions? *Food Chem.* **50**, (1994).
2. Khan, M.K.A., Ansari, I.A., Khan, M.S., *et al.* Dietary phytochemicals as potent chemotherapeutic agents against breast cancer: Inhibition of NF- κ B pathway via molecular interactions in rel homology domain of its precursor protein p105. *Pharmacogn. Mag.* **9(33)**, 51-57 (2013).
3. Han, Y., Gao, Y., He, T., *et al.* PD-1/PD-L1 inhibitor screening of caffeoylquinic acid compounds using surface plasmon resonance spectroscopy. *Anal. Biochem.* **547**, 52-56 (2018).

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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