

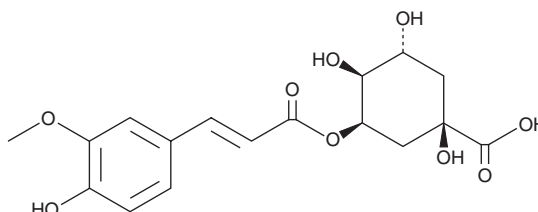
# PRODUCT INFORMATION



## 5-Feruloylquinic Acid

Item No. 34349

**CAS Registry No.:** 40242-06-6  
**Formal Name:** 1R,3R,4S-trihydroxy-5R-[[3-(4-hydroxy-3-methoxyphenyl)-1-oxo-2-propen-1-yl]oxy]-cyclohexanecarboxylic acid  
**Synonym:** 5-FQA  
**MF:** C<sub>17</sub>H<sub>20</sub>O<sub>9</sub>  
**FW:** 368.3  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 219, 236, 326 nm  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥4 years  
**Item Origin:** Plant/*Coffea canephora*



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

### Laboratory Procedures

5-Feruloylquinic acid is supplied as a solid. A stock solution may be made by dissolving the 5-feruloylquinic acid in the solvent of choice, which should be purged with an inert gas. 5-Feruloylquinic acid is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of 5-feruloylquinic acid in these solvents is approximately 30 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of 5-feruloylquinic acid can be prepared by directly dissolving the solid in aqueous buffers. The solubility of 5-feruloylquinic acid in PBS (pH 7.2) is approximately 20 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

5-Feruloylquinic acid is a chlorogenic acid that has been found in green coffee beans and has antioxidant activity.<sup>1</sup> It scavenges DPPH (Item No. 14805) and superoxide anion radicals in cell-free assays (IC<sub>50</sub>s = ~9 and ~36 μM, respectively).

### Reference

1. Iwai, K., Kishimoto, N., Kakino, Y., *et al.* In vitro antioxidative effects and tyrosinase inhibitory activities of seven hydroxycinnamoyl derivatives in green coffee beans. *J. Agric. Food Chem.* **52**(15), 4893-4898 (2004).

#### 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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