

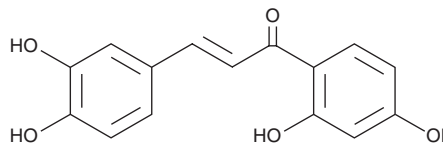
PRODUCT INFORMATION



Butein

Item No. 15371

CAS Registry No.: 487-52-5
Formal Name: (2E)-1-(2,4-dihydroxyphenyl)-3-(3,4-dihydroxyphenyl)-2-propen-1-one
Synonym: 2',3,4,4'-tetrahydroxy Chalcone
MF: C₁₅H₁₂O₅
FW: 272.3
Purity: ≥95%
UV/Vis.: λ_{max}: 262, 348, 382 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Butein is supplied as a crystalline solid. A stock solution may be made by dissolving the butein in the solvent of choice, which should be purged with an inert gas. Butein is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of butein in ethanol and DMSO is approximately 20 mg/ml and approximately 25 mg/ml in DMF.

Butein is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, butein should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Butein has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Butein is a plant polyphenol that is classified as a chalcone, due to the propenone linkage between the phenol groups. Like other polyphenols, butein is a potent antioxidant and affects the numerous pathways modulated by oxidant tone, including inflammation, cancer, and immune response.¹⁻³ It inhibits 5-lipoxygenase, the enoyl-acyl-carrier protein reductase of *P. falciparum*, angiotensin-converting enzyme, and Src kinase (IC₅₀ or K_i values of 0.01, 2.97, 0.73, and 65 μM, respectively).⁴⁻⁷ Butein is also a sirtuin activator, increasing trichostatin A (Item No. 89730)-insensitive deacetylase activity.^{8,9}

References

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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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