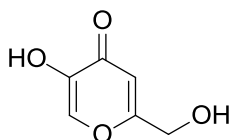


Kojic acid

Code No.: **BIA-K1696**

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



Synonyms : 5-Hydroxy-2-(hydroxymethyl)-4H-pyran-4-one; NSC 1942

Specifications

CAS #	: 501-30-4
Molecular Formula	: C ₆ H ₆ O ₄
Molecular Weight	: 142.1
Source	: <i>Aspergillus sp.</i>
Appearance	: White to off-white solid
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in ethanol, methanol, DMF or DMSO.

Application Notes

Kojic acid is a polar pyranone metabolite found in high concentrations in many species of *Aspergillus* and other fungi. The history of kojic acid and its relationship to koji (*Aspergillus oryzae* fermentation) is well reviewed by Bentley (2006) who dates its discovery to 1907 with its structure being reported by Shibata in 1924. Kojic acid is a weak antibacterial and forms chelates with many metal ions. Kojic acid from an extract of *Aspergillus albus* was shown to be a tyrosinase inhibitor driving continuing interest in this metabolite as a skin de-pigmentation agent. Kojic acid is an important metabolite in chemical and bioassay dereplication.

References

1. The constitution of kojic acid, a γ -pyrone derivative formed by *Aspergillus Oryzæ* from carbohydrates. Yabuta T., J. Chem. Soc. 1924, 125, 575.
2. Kojic acid, a tyrosinase inhibitor from *Aspergillus albus*. Saruno R. et al., Agric. Biol. Chem., 1979, 43, 1337.
3. From miso, sake and shoyu to cosmetics: a century of science for kojic acid. Bentley R., Nat. Prod. Rep. 2006, 23, 1046.