LKT Laboratories, Inc.

3,4-Dihydroxyphenyl Ethanol

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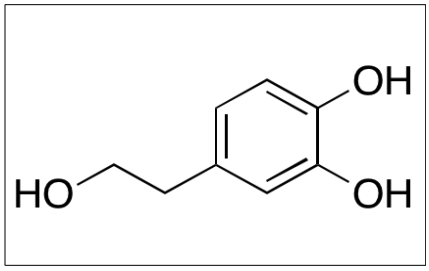
Product Information

Product ID D3431
CAS No. 10597-60-1
Chemical Name 2-(3,4-Dihydroxyphenyl)ethyl alcohol

Synonym 3-Hydroxytyrosol



Formula $C_8H_{10}O_3$
Formula Wt. 154.16
Melting Point
Purity ≥95%
Solubility Freely soluble in organic solvents. Slightly soluble in water (5 g/100 ml) at 25 oC.
Store Temp 4˚C
Ship Temp Ambient

Bulk quanitites available upon request

Product ID	Size
D3431	10 mg
D3431	25 mg
D3431	100 mg

Description 3,4-Dihydroxyphenol ethanol, also known as 3-hydroxytyrosol, is a polyphenol originally found in olive oil. 3-Hydroxytyrosol exhibits antioxidative, anti-inflammatory, anti-hyperlipidemic, anti-diabetic, anti-platelet, and anticancer chemotherapeutic activities. In brain slices undergoing hypoxia and reoxygenation, 3-hydroxytyrosol increases radical scavenging and glutathione activity and decreases lipid peroxidation and expression of prostaglandin E2 (PGE2) and IL-1ß. 3-Hydroxytyrosol also decreases expression of prostaglandin E2 (PGE2), matrix metalloproteinase 9 (MMP9), and COX-2 through inhibition of PKC activation and NF-κB translocation. In animal models of diabetes, 3-hydroxytyrosol inhibits SREBP/Fas signaling to decrease lipid deposits and inhibits mitochondrial apoptosis, resulting in decreases in fasting glucose, serum lipid levels, and lipid oxidation. In whole blood and plasma, this compound inhibits platelet aggregation, inhibiting production of thromboxane B2, TNF-α, and leukocyte 6-keto-PGF1. Additionally, 3-hydroxytyrosol inhibits proliferation of cholangiocarcinoma cells in vitro and inhibits tumor growth of xenografts in vivo.

References

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