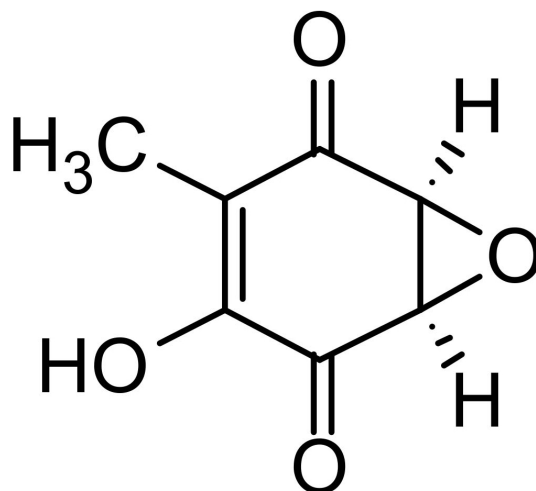


Terreic acid

Code No.: BIA-T1695

Pack sizes.: 1mg, 5mg



Synonyms:

(-)-Terreic acid

Specifications

CAS #	: 121-40-4
Molecular Formula	: C7H6O4
Molecular Weight	: 154.12
Source	: -
Appearance	: Off-white solid
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in ethanol, methanol, DMF or DMSO.

Application Notes

Terreic acid is a hemiquinone isolated as an antibacterial metabolite by Abraham and Florey in 1949. The stereochemistry of terreic acid was resolved by Miller in 1968. Terreic acid possesses broad Gram positive and Gram negative activity. Terreic acid is biosynthesised from 6-methylsalicylic acid and acts as a covalent inhibitor of the bacterial cell wall biosynthetic enzyme, MurA. Recently, terreic acid has been shown to bind to the acetyltransferase domain of a bifunctional enzyme, N-acetylglucosamine-1-phosphate-uridylyltransferase/glucosamine-1-phosphate-acetyltransferase (GlmU), in *Escherichia coli*.

References

1. Abraham E. P. and Florey H. W., in *Antibiotics*, Florey H.W. et al., eds. Oxford University Press, New York, N. Y., 1949, Vol. I, 337.
2. The structure of terremitin. Miller M.W., *Tetrahedron* 1968, 24, 4839.
3. The fungal product terreic acid is a covalent inhibitor of the bacterial cell wall biosynthetic enzyme UDPN-acetylglucosamine 1-carboxyvinyltransferase (MurA). Huijong H. et al., *Biochem.* 2010, 49, 4276.
4. Escherichia coli N-acetylglucosamine-1-phosphate-uridyltransferase/glucosamine-1-phosphate-cetyltransferase (GlmU) inhibitory activity of terreic cid isolated from *Aspergillus terreus*. Sharma R. et al., *J. Biomol. Screen.* 2016, 21, 342.