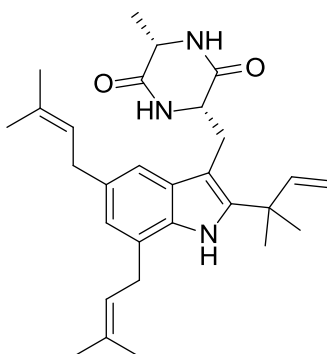


Echinulin

Code No.: **BIA-E1684**

Pack sizes: **1 mg, 5 mg**



Synonyms : Echinuline

Specifications

CAS #	: 1859-87-6
Molecular Formula	: C ₂₉ H ₃₉ N ₃ O ₂
Molecular Weight	: 461.6
Source	: <i>Aspergillus</i> sp.
Appearance	: Off-white solid
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in ethanol, methanol, DMF or DMSO.

Application Notes

Echinulin is a diketopiperazine isolated originally from *Aspergillus echinulatus* by Quilico and Cardini, University of Florence, Italy in 1943. Echinulin is a unique secondary metabolite with the tryptophan component comprising a triprenylated indole in the 2-, 5- and 7- positions. The high level of prenylation and the “reverse” incorporation of the 2-prenyl group stimulated a large number of articles on the metabolite’s biosynthesis. Echinulin has pulmonary and hepatic toxicity but despite extensive interest, its pharmacology is largely unexplored.

References

1. Chemische untersuchungen über *Aspergillus echinulatus*, I. Mitteilung. Quilico A. and Panizzi L., Chem. Ber. 1943, 76, 348.
2. Monoisoprenylated cyclo-L-alanyl-L-tryptophanyl. Biosynthetic precursor of echinulin. Allen C.M., J. Am. Chem. Soc., 1973, 95, 2386.
3. Biosynthesis of aromatic isoprenoids. Part 5. The preparation of 1-(3,3-dimethylallyl)-L-tryptophan and cyclo-L-alanyl-1-(3,3-dimethylallyl)-L-tryptophan and their non-incorporation into echinulin. Grundon M.F. et al., J. Chem. Soc. Perkin I 1980, 1294.
4. Toxicity of echinulin from *Aspergillus chevalieri* in rabbits. Muslim A. et al., Toxicol. Lett. 1989, 48, 235.