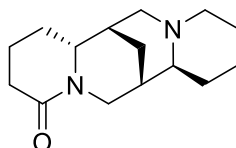


Lupanine

Code No.: **BIA-L1951**

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



Synonyms : (+)-2-Oxosparteine, (+)-Lupanine, Oxosparteine, D-(+)-Lupanine, D-Lupanine, Lupanin, d-Lupanine

Specifications

CAS #	: 550-90-3
Molecular Formula	: C ₁₅ H ₂₄ N ₂ O
Molecular Weight	: 248.36
Source	: <i>Lupinus albus L.</i>
Appearance	: Off-white solid
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in methanol or DMSO

Application Notes

Lupanine is a tetracyclic quinolizidine isolated from lupins. Lupanine inhibits the growth of phytopathogenic fungi, reducing the germination of conidia of powdery mildew and the further development to appressoria with an IC₅₀ of 1-5 mmol/L. Lupanine inhibits the germination of *Lactuca sativa L.* In animal models of Type 2 diabetes, lupanine modulates insulin release via inhibition of ATP-dependent K⁺ channels and increases the expression of the *Ins-1* gene. Lupin seed extracts containing lupanine have anthelmintic activity, inhibiting the migration of susceptible and multidrug resistant *Haemonchus contortus* and susceptible *Teladorsagia circumcincta*. Lupin extracts are active against Gram positive and Gram negative bacteria.

References

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4. Lupanine improves glucose homeostasis by influencing K⁺ channels and insulin gene expression. Wiedemann M. et al. *Molecules* 2015, 20, 19085.
5. Lupin (*Lupinus* spp.) seeds exert anthelmintic activity associated with their alkaloid content. Dubois O. et al. *Sci Rep.* 2019, 9, 9070.
6. Alkaloid profile and antimicrobial activity of *Lupinus angustifolius L.* alkaloid extract. Kucukboyaci N. et al. *Phytochem Rev.* 2007, 6, 197.