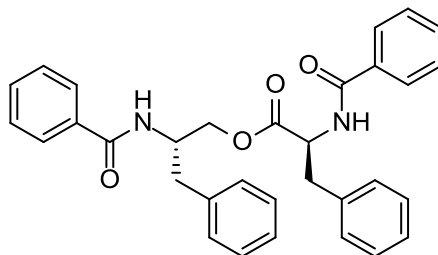


Asperphenamate

Code No.: **BIA-A1643**

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



Synonyms :

Specifications

CAS #	:	63631-36-7
Molecular Formula	:	C₃₂H₃₀N₂O₄
Molecular Weight	:	506.6
Source	:	<i>Aspergillus</i> sp.
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

Asperphenamate is an unusual ester of N-benzoylphenylalanine and N-benzoylphenylalaninol isolated from *Aspergillus flavipes* and first reported by Clark and co-workers in 1977. Since then, asperphenamate has been found in a broad range of *Penicillium* and *Aspergillus* species and even in plants, as a product of endophytic fungi. Asperphenamate has weak antitumor activity. Recently, a more soluble analogue, BBP, was found to induce autophagic cell death in tumor cells, a process modulated by a JNK-dependent Atg4 upregulation involving ROS production.

References

1. Two metabolites from *Aspergillus flavipes*. Clark A.M. et al., *J. Nat. Prod. (Lloydia)* 1977, 40, 146.
2. Synthesis of asperphenamate, a novel fungal metabolite. Clark A.M. and Hufford C.D., *Phytochem.* 1978, 17, 552.
3. Two new *Penicillium* species *Penicillium buchwaldii* and *Penicillium spathulatum*, producing the anticancer compound asperphenamate. Frisvad J.C., *FEMS Microbiol. Lett.* 2013, 339, 77.
4. JNK-dependent Atg4 upregulation mediates asperphenamate derivative BBP-induced autophagy in MCF-7 cells. Lia Y. et al., *Toxicol. Appl. Pharmacol.* 2012, 263, 21.