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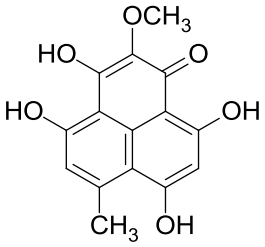
PRODUCT DATA SHEET

Funalenone

Code No.: **BIA-F1666**

Pack sizes: **0.5 mg, 2.5 mg**



Synonyms : BMS 304245

Specifications

CAS #	:	**259728-61-5**
Molecular Formula	:	**$C_{15}H_{12}O_6$**
Molecular Weight	:	**288.3**
Source	:	***Aspergillus* sp.**
Appearance	:	**Yellow to tan solid**
Purity	:	**>95% by HPLC**
Long Term Storage	:	**-20°C**
Solubility	:	**Soluble in ethanol, methanol, DMF or DMSO.**

Application Notes

Funalenone is phenalenone isolated as a novel inhibitor of collagenase from Aspergillus niger by Omura and co-workers at the Kitasato Institute, Japan in 1999. Funalenone was reported to be devoid of antimicrobial activity (Gram positive and Gram negative, yeast and fungi). However, funalenone was also reported to inhibit bacterial cell wall synthesis enzymes, MraY and MurG. Funalenone has been identified as a potent inhibitor of HIV-1 integrase, showing 50-fold selectivity over mammalian cell toxicity.

References

1. Funalenone, a novel collagenase inhibitor produced by Aspergillus niger. Inokoshi J. et al., J. Antibiot. 1999, 52, 1095.
2. Targeting the MraY and MurG bacterial enzymes for antimicrobial therapeutic intervention. Zawadzke L.E., Anal. Biochem. 2003, 314, 243.
3. Fungal phenalenones inhibit HIV-1 integrase. Shiomi K. et al., J. Antibiot. 2005, 58, 65.

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