Description
Penicillic acid is a neuroactive mycotoxin initially produced by species of *Penicillum* and *Aspergillus*. In vitro and in vivo, penicillic acid inhibits Ca2+-sensitive (BK) K+ channels as well as Na+, K+, and Ca2+ channels in cardiac tissue. Penicillic acid exhibits antifungal and anti-apoptotic activities. In vitro, penicillic acid increases expression of histone demethylase JMJD-3 and decreases expression of histone deacetylase 3 (HDAC3), inhibiting proliferation of macrophages. Penicillic acid inhibits FasL-induced apoptosis, preventing activation of caspases 3 and 9 through inhibition of upstream signaling and also preventing activation of caspase 8 through direct inhibition. Additionally, this compound induces abnormal branching and swelling in species of *Phytophthora*.

References


Caution: This product is intended for laboratory and research use only. It is not for human or drug use.