Purdue Bioscience

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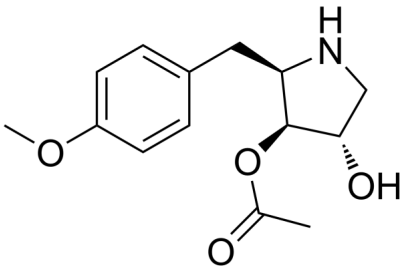
Certificate of Analysis

Catalog Number	BP22528
Product Name	Anisomycin

Physical and Chemical Properties

CAS No.	22862-76-6
Chemical Formula	C14H19NO4
Molecular Weight	265.31
Solubility	DMSO: ≥ 50 mg/mL (188.46 mM) H2O: 4 mg/mL (15.08 mM, Need ultrasonic and warming and heat to 60°C)
Storage	Powder: -20°C for 2 years In solvent: -80°C for 1 year
Chemical Structure OR Tested Image	

Product Information

Description	Anisomycin is a potent protein synthesis inhibitor which interferes with protein and DNA synthesis by inhibiting peptidyl transferase or the 80S ribosome system. Anisomycin is a JNK activator, which increases phospho-JNK. Anisomycin is a bacterial antibiotic.
Targets&IC50	JNK; DNA synthesis
In vitro	To examine whether JNK has a core role in colistin-induced neurotoxicity in PC-12 cells, an SP600125 (a highly selective inhibitor of JNK) and Anisomycin (a potent activator) are used in this study. In order to select an appropriate concentration, PC-12 cells are treated with a range of SP600125 (0-80 μM) and Anisomycin (0-20 μM) respectively for 24 h. The results show that the cells viability significantly decreases by SP600125 treatment in a concentration-dependent manner, observed at the concentrations greater than 20 μM ($p<0.01$). Similarly the cells viability is inhibited by Anisomycin treatment (≥8 μM) ($p<0.05$) .
In vivo	Anisomycin (60 mg/kg; for 4-week continuous intravenous administration) significantly decreases mouse body weight in a dose-related manner, compared with the control group. Anisomycin (15 mg/kg; for 4-week continuous intravenous administration) slightly and transiently decreases the mouse body weight. There is no significant difference of the mouse body weight in 5 mg/kg group.

Analytical Data

HPLC	Shows Min >99% purity
H-NMR	Consistent with structure
Stability and Solubility Advice	Information on product stability, especially in solution, has rarely been reported and in most cases we can only provide a general guideline. We recommend that once the stock solution has been prepared, it be stored in equal quantities in sealed vials and used within 1 month. Avoid repeated freezing and thawing cycles. Storage conditions for some special products should be referred to their storage details.

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