

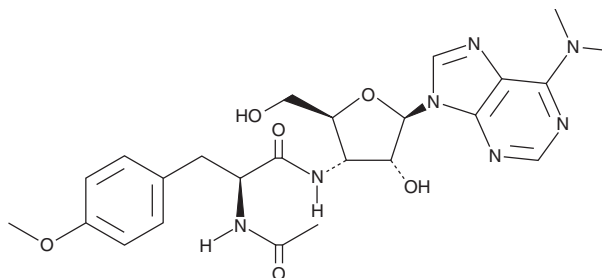
# PRODUCT INFORMATION



## N-Acetylpuromycin

Item No. 25335

CAS Registry No.: 22852-13-7  
Formal Name: 3'-[[[(2S)-2-(acetylamino)-3-(4-methoxyphenyl)-1-oxopropyl]amino]-3'-deoxy-N,N-dimethyl-adenosine  
MF:  $C_{24}H_{31}N_7O_6$   
FW: 513.6  
Purity:  $\geq 98\%$   
Supplied as: A solid  
Storage:  $-20^\circ\text{C}$   
Stability:  $\geq 4$  years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

N-Acetylpuromycin is supplied as a solid. A stock solution may be made by dissolving the N-acetylpuromycin in the solvent of choice. N-Acetylpuromycin is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of N-acetylpuromycin in these solvents is approximately 70 and 55 mg/ml, respectively.

### Description

N-Acetylpuromycin is a non-ribotoxic form of the antibiotic puromycin (Item No. 13884) that is formed in puromycin-resistant *S. alboniger* that endogenously express puromycin-acetyltransferase.<sup>1</sup> In AD293(Pr) cells that express puromycin-N-acetyltransferase, the enzyme responsible for the biosynthesis of N-acetylpuromycin, puromycin application induces downregulation of the negative regulators of TGF- $\beta$  signalling SnoN and Ski without activating MAPK or inhibition of protein synthesis.<sup>2</sup>

### References

1. Sugiyama, M., Paik, S.-Y., and Nomi, R. Mechanism of self-protection in a puromycin-producing micro-organism. *J. Gen. Microbiol.* **131**(8), 1999-2005 (1985).
2. Hernández-Damián, J., Tecalco-Cruz, A.C., Ríos-López, D.G., et al. Downregulation of SnoN oncoprotein induced by antibiotics anisomycin and puromycin positively regulates transforming growth factor- $\beta$  signals. *Biochim. Biophys. Acta* **1830**(11), 5049-5058 (2013).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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