Puromycin (10 mg/ml; 1 ml)
(PURO-1)

Catalog #0553

Product Description

Puromycin is an aminonucleoside antibiotic isolated from *Streptomyces alboniger*. Puromycin terminates protein synthesis at the level of translation in prokaryotic and eukaryotic cells and is active against gram-positive bacteria and weakly active against gram-negative bacteria. Resistance to puromycin is conferred by the puromycin N-acetyl-transferase (pac) gene [1, 2]. Exogenous expression of the pac gene is commonly used in conjunction with puromycin to generate stable cell lines.

Most working concentrations range from 1-10 µg/ml; however, the optimal concentration should be determined for individual cell types and culture conditions. In most cases, puromycin kills 99% of non-resistant cells within 48 hours.

Concentration

10 mg/ml in ultra-pure deionized water, sterile-filtered.

Product Use

PURO-1 is for research use only. It is not approved for human or animal use, or for application in clinical or *in vitro* diagnostic procedures.

Storage

Store at -20°C; avoid freeze-thaw cycles.

Shipping

Dry ice.

References

[1] Vara J, Perez-Gonzalez JA, Jimenez A. (1985) "Biosynthesis of puromycin by Streptomyces alboniger: characterization of puromycin N-acetyltransferase". *Biochemistry* 24: 8074-8081.
[2] Lacalle RA, Pulido D, Vara J, Zalacain M, Jimenez A. (1989) "Molecular analysis of the pac gene encoding a puromycin N-acetyl transferase from Streptomyces alboniger". *Gene* 79: 375-380.

Caution: If handled improperly, some components of this product may present a health hazard. Take appropriate precautions when handling this product, including the wearing of protective clothing and eyewear. Dispose of properly.