

## Actinomycin D (10 mg/mL)

Cat. No.: PB180135

Size: 1mL

### Product Description

Actinomycin D is an antitumor antibiotic that inhibit cell proliferation and induces apoptosis in tumor cells. This compound inhibits cell proliferation in a non-specific manner by forming a stable complex with double-stranded DNA (via deoxyguanosine residues), thereby inhibiting DNA-initiated RNA synthesis. Additionally, Actinomycin D causes single-strand breaks in DNA, contributing to its cytotoxic effects.

Actinomycin D inhibits the negative strand transfer step in reverse transcription, making it useful for studying and inhibiting HIV replication.

This reagent is commonly used in various bioscience studies: Related studies have also shown that it can inhibit etoposide (an inhibitor of topoisomerase II)-induced programmed cell death in PC12 cells; the binding of actinomycin D to yeast in ribosomal RNA has been studied; the sensitivity and binding mechanism of various Escherichia coli strains to actinomycin D has been studied; and actinomycin D has also been used in molecular biology as a DNA intercalizing polymerase that blocks the progress.

### General Information

Form	Liquid
Concentration	10 mg/mL
Size	1mL
Storage Conditions	-5~-20°C. Protect from light
Transport Conditions	Ice bag
Expiration Date	12 months

### Notes

1. This reagent is a toxic compound, please ensure proper protection during operation.
2. This product has been filtered and sterilized by 0.1 µm filter, can be used directly after melting.
3. When using this product, attention should be paid to aseptic operation to avoid contamination.
4. The product should be stored in 2-8°C thawed, shake well after use, repeated freezing and thawing is not recommended.
5. If there are precipitates after thawing, they can be vortexed and mixed evenly or blown with a pipette. After standing at room temperature for about 1 hour or at 37°C in an incubator for 20-30 minutes, observe whether the precipitates can be dissolved normally, and if they can be dissolved, it can be used normally.
6. This product is a concentrated liquid, please dilute it as needed.
7. It is recommended to use the regular at 2-8°C for preservation within one month. It needs to be frozen at -5~-20°C when not in use for a long time, and it is not suitable for long-term storage at room temperature or 2-8°C. To avoid repeated freezing and thawing, it is recommended to store it in small quantities after subpackaging.
8. This product is only for scientific research or further research use, not for diagnosis and treatment.