Rat tail tendon collagen type I (12 μg/mL)

Cat. No. : PB180635

Size：5mL

Product Description

Rat tail tendon collagen type I (also known as type I collagen, collagen type I) is commonly utilized to enhance cell adhesion during the culture process. Proper adhesion is crucial for supporting the normal growth of certain cell types. It is specifically designed for use in cell culture applications and should not be used for other purposes.

General Information

Product Form	Liquid
Concentration	12 μg/mL
Size	5mL
Storage Conditions	-5~-20°C, 12 months
	2-8°C, 1 month
Transport Conditions	Ice bag

Use Instructions

1. Under aseptic conditions within a biosafety cabinet, 1-2 mL of rat tail collagen type I is aspirated using a pipettor and transferred into a T25 culture flask. The flask is gently swirled to ensure complete and uniform coverage of the bottom surface with the collagen solution.
   Note: Each culture flask can be coated with 5 mL solution, allowing for simultaneous coating of five flasks. Following the initial distribution of 5 mL solution to evenly coat the bottom surface of each flask, the solution is then equally aliquoted into 1 mL portions for subsequent individual flask coating procedures.
2. Tighten the caps on the culture flasks and place them in a 37°C incubator, letting the coating incubate for 1-2 hours or longer.
3. The culture bottle was removed and the excess collagen type I is aspirated, which could be retained for the next use. It is recommended that it be reused no more than once. If used more than once, it will increase the probability of operation contamination and reduce the coating effect.
4. The covered bottle is capped and placed in an incubator at 37°C or a refrigerator at 4°C and kept sterile.
5. The culture bottle should be kept in the incubator at 37°C for more than 4 hours or the refrigerator at 4°C for more than 24 hours to ensure that the bottom of the culture bottle is dry and liquid free.
6. The collagen-coated culture flasks can be stored under two recommended conditions: at room temperature within a biosafety cabinet or at 4°C in a refrigerator. While these flasks maintain stability for 3-7 days, it is strongly advised to utilize them within 3 days of preparation. If it is stored too long, the coating effect may be invalid.
7. The coated flask is removed and washed 3 times with PBS or medium in an biosafety cabinet.
8. The culture bottles is used for normal inoculation.

Notes

1. This product is only used for scientific research or further research, not for diagnosis and treatment.
2. The volume of coating solution required varies according to the specific culture vessel dimensions. The fundamental principle is to ensure complete coverage of the vessel's growth surface while maintaining adequate moisture throughout the coating duration. When the minimum threshold for complete surface coverage and optimal coating time are maintained, moderate variations in coating solution volume do not significantly compromise the coating efficacy.

Culture vessels	Dosage recommendation (for reference only)
1 well in a 12-well plate	0.5 mL
1 well in a 6-well plate	0.8 mL
6 cm culture dish	1-1.5 mL
10 cm culture dish	3 mL
T25 culture flask	1-1.5 mL
T75 culture flask	3-4 mL

3. The rat tail collagen type I solution has mild toxicity, so it is essential to wash the coated culture vessels three times with PBS or culture medium before use.
4. The coating process includes two stages: coating time and drying time. Coating time is the period during which the coating solution adheres to the surface; it is advisable to follow the recommended time since longer durations do not improve the effect.The drying time is the period allowed for the coated culture vessels to air dry after coating, ensuring that the coating solution is completely dry and achieves optimal adhesive properties.
5. Transporting the coating solution at room temperature for 3-5 days will not affect its performance. However, it should be stored according to storage conditions.
6. All the above operations should base on sterile reagents, consumables, and operation in a sterile environment.

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