Cell Guidance Systems Ltd, Babraham Research Park, Cambridge CB22 3AT, UK

Data Sheet

Research Use Only

Product Name

RGD (Arg-Gly-Asp) peptide, 5 mg

Catalog Number

AP16

Description

RGD peptide is a synthetic peptide containing the RGD cell attachment sequence found in fibronectin, vitronectin and many other matrix and serum proteins. The RGD motif is present at the N-terminal end of the peptide, allowing for optimal cell attachment via integrin receptors.

Peptide Sequence

Ac-Gly-D-**Arg-Gly-Asp**-Ile-Pro-Ala-Ser-Ser-Lys-Gly-Gly-Gly-Gly-Ser-D-Arg-Leu-Leu- Leu-Leu- Leu-Leu-D-Arg-NH_2

Counter Ion

Acetate

Purity

> 95% confirmed by RP-HPLC

Identity Confirmed by Amino Acid Analysis

Characteristic

Endotoxin Level

< 1.0 EU/ml

Identity Confirmed by Mass Spectrometry

Characteristic

Storage

4 °C

Peptide Content Confirmed by Nitrogen Analysis

Characteristic

Coating Procedure

Note: Use these recommendations as guidelines to determine the optimal coating conditions for your culture system. To maintain sterility, perform all operations in a laminar flow hood. Two options are provided:

Procedure A

1. Remove cap and add 5 ml of serum-free medium or PBS to the bottle.
2. Replace cap and vortex contents vigorously. Ensure that the RGD peptide is completely solubilized. The solution will remain slightly hazy.
3. Transfer desired volume of solution from the bottle to a dilution vessel. Dilute to desired concentration using serum-free medium or PBS. A typical working concentration may range from 0.1 to 10 µg/ml.
4. Add appropriate amount of diluted material to culture surface.
5. Incubate at room temperature or 37°C, covered, for 1-2 hours.
6. After incubation, aspirate remaining material.
7. Rinse plates carefully with dH2O – avoid scratching bottom surface of plates.
8. Plates are ready for use. They may also be stored at 2-8°C damp or air dried if sterility is maintained.
9. Store remaining solubilized RGD peptide at 2 to 10°C.

Additional note: Include divalent cations (Calcium, Magnesium, or Manganese) in cell attachment solution to obtain optimum cell binding.

Procedure B

1. Remove cap and add 5 ml of sterile 70% ethanol.
2. Replace cap and vortex contents. Ensure that the RGD peptide is completely solubilized.
3. Transfer desired volume of solution from the bottle to a dilution vessel. Dilute to the desired concentration using 70% ethanol. Concentrations from 0.1 to 10 µg/ml should be tested.
4. Add appropriate amount of diluted material to culture surface.
5. Leave the coated container, uncovered, in a laminar flow hood until the wells are dry.
6. Rinse plates carefully with dH2O – avoid scratching bottom surface of plates.
7. Plates are ready for use.
8. Store remaining solubilized RGD peptide at 2 to 10°C.