

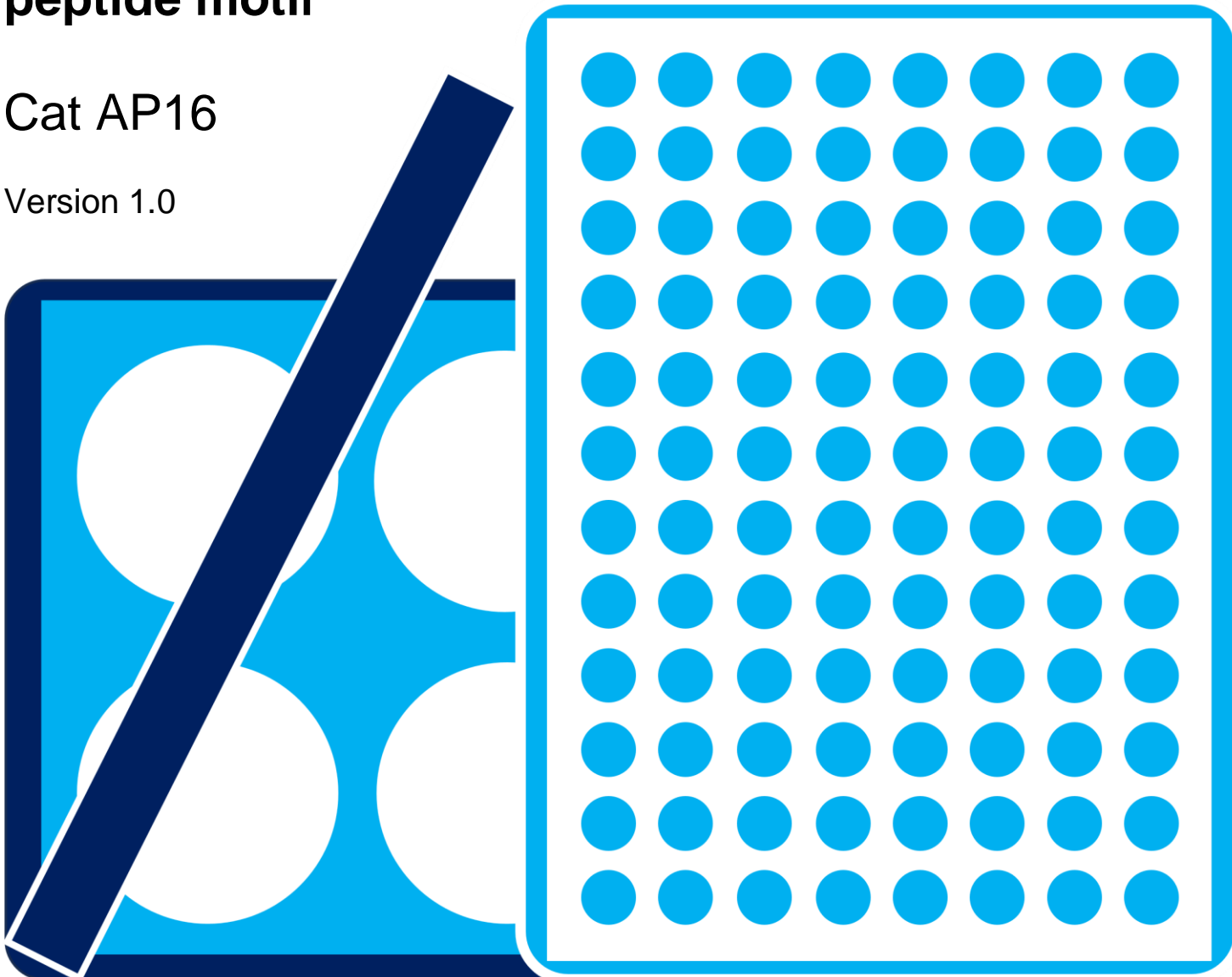
User Guide

# RGD (Arg-Gly-Asp) Peptide

**Synthetic functional  
peptide motif**

Cat AP16

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## Contents

Storage	3
Equipment and materials required but not supplied with product	3
Introduction and applications	3
Procedure	4
A. Procedure A	4
B. Procedure B	5
Purchaser Notification	7

# RGD (Arg-Gly-Asp) Peptide

## Synthetic Functional Peptide Motif

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### Storage

RGD peptide is supplied in plastic vials that should be stored in a standard laboratory fridge at 4°C. The vials should be opened in a sterile environment (e.g. a class II flow cabinet), and the peptide resuspended, and used within 12 months.

### Equipment and materials required but not supplied with product

- Serum-free medium or PBS
- Vortex mixer
- 0.22 micron button filter
- Culture surface

### Introduction and applications

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

This RGD peptide has been specifically engineered to spontaneously adhere to a variety of surfaces such as polystyrene (either tissue culture treated or non-treated), hollow fibers made of cellulose, glass, polycarbonate membranes and many other materials. This enables use in a wide range of cell culture applications.

## Procedure

**Please note: Use these recommendations as guidelines to determine the optimal coating conditions for your cultures system. Two options are provided: procedure A and procedure B.**

### A. 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. Sterile filter solution through a 0.22 micron button filter.
5. Aseptically add appropriate amount of diluted, sterile material to culture surface.
6. Incubate at room temperature or 37°C, covered, for 1 - 2 hours.
7. After incubation, aspirate remaining material.
8. Rinse plates carefully with dH<sub>2</sub>O - avoid scratching bottom surface of plates.
9. Plates are ready for use. They may also be stored at 2 - 10°C damp or air dried if sterility is maintained.
10. Store remaining solubilized RGD peptide at 2 - 10°C.

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

## B. 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  $\mu\text{g/ml}$  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 dH<sub>2</sub>O - avoid scratching bottom surface of plates.
7. Plates are ready for use.
8. Store remaining solubilized RGD peptide at 2 - 10°C.

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## Purchaser Notification

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