

PRODUCT DATA SHEET

BUFFER COATING

0.1M CARBONATE/BICARBONATE BUFFER pH 9.6 1x
 0.1M CARBONATE/BICARBONATE BUFFER pH 9.6 10x

1. Description

Carbonate/Bicarbonate buffer is used for proteins and antibodies coating procedures on plastic surfaces. It's also used for adsorptive immobilization of other protein binding surfaces for ELISA, EIA, RIA techniques, immuno-PCR and protein arrays.

The Biomat 0.1M Carbonate/Bicarbonate pH 9.6 is offered as pre-weighed powder mix for solution 1x or stock solution 10x.

Code	Size	Physical state	Solution vol.	Concentration
100-10-100	1 pouch	powder	100 ml/pouch	1x
100-10-500	1 pouch	powder	500 ml/pouch	1x
100-10-1000	1 pouch	powder	1000 ml/pouch	1x
100-12-100	1 pouch	powder	1 L/pouch	10x
100-12-500	1 pouch	powder	5 L/pouch	10x
100-12-1000	1 pouch	powder	10 L/pouch	10x

2. Features

Composition: 0.03 M Na ₂ CO ₃ 0.07 M NaHCO ₃
Does not contain preservatives
Negligible differences lot to lot

3. Specifications

pH	9.60 ± 0.2 at 25°C, after dissolution
Colour	White powder
Dissolution time	≤ 7 min

4. Stability and storage

12 months in a dry place at room temperature – Shipping condition: Room temperature	
Other information	All lots are tested
	Certificate of Quality is released for every lot

HOW TO USE

Empty one pouch in a beaker. Add :

90 ml of deionized water for pouches in the volume range 100 ml

400 ml of deionized water for pouches in the volume range 500 ml

900 ml of deionized water for pouches in the volume range 1000 ml

Place the beaker on a magnetic stirrer, slightly warm and stir the solution a few minutes, until full dissolution.

When the powder is dissolved, adjust the indicated volume with deionized water in a cylinder and the buffer is ready to use.

Before use dilute stock solution 1:10 with deionized water to get the working solution.

Dilute your proteins or other biomolecules in this working solution, mix and use for your coating step.

Proceed as usual.

In the solution, after storage at 2-8°C or after freezing, crystals of salt can precipitate. Therefore the buffer has to be warmed up to room temperature and has to be mixed thoroughly before use. This leads to dissolve salts after shaking. Coating buffers 0.1M Carbonate/Bicarbonate pH 9.6 1x – 0.1M Carbonate/Bicarbonate pH 9.6 10x tolerate repeated freezing and thawing cycles.

Any user should optimize its own incubation procedure because the optimal incubation time can differ depending on biomolecules as well as on surface.

The pH-value has influence on the steric structure of proteins or antibodies and so for some proteins 0.1M Carbonate/Bicarbonate pH 9.6 coating buffer is better, but for other molecules, 0.1M PB pH 7.2 or 0.1M PB pH 6.0 coating buffers can be better. For an optimized immobilization procedure we recommend to test all our coating buffers in comparison.

If necessary, sterilization of the solution can be performed by filtration (0.22 µm filter).

Product Data Sheet subject to change without notice.

For detailed technical information visit www.biomat.it