

CALMODULIN COATED SURFACE

Biomat has developed a polystyrene surface with physically adsorbed Calmodulin protein. The Calmodulin Ca^{++} binding protein is able to bind proteins mainly with hydrophobic sites in its surface.

The polystyrene optical features don't change, allowing the modified surface to be used as a valid tool to carry out biological tests.

This surface shows its usefulness for these applications:

- interactions with proteins involved in glycogen metabolism
- interactions with factors involved in neurotransmission mechanism
- interactions with enzymes involved in the $NAD^*/NADP^*$ phosphorylation system

TECHNICAL NOTE N. 19

Evaluation of binding specificity towards monoclonal anti-calmodulin

1. Dilute anti-calmodulin monoclonal antibody from 1000 to 0 ng/ml with 0.1 M PBS pH 7.2 containing 0.2 % BSA
2. Add 100 μ l of each dilution to the wells of Calmodulin coated plate and incubate 60' R.T. Add the same solutions to Albumin coated plate as comparison for evaluate the specificity of binding
3. Leave blank wells as control
4. Empty the wells and wash with 0.1M PBS pH 7.2 + 0.05% Tween[®] 20 four times
5. Add 100 μ l / well of conjugate goat anti-mouse-HRP and incubate 30' R.T.
6. Add 100 μ l /well of TMB substrate solution and incubate 10 minutes at room temperature
7. Stop the substrate reaction by adding 100 μ l of sulphuric acid 1 N and read the optical density values at 450 nm

Binding specificity calmodulin coated plate

