

IMMOBILIZATION OF PEG-CYTOCHROME C ON CARBON NANOTUBES

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Cytochrome c from horse heart was immobilized on carbon nanotubes through polyethylene glycol (PEG), which was covalently attached to the free amine groups on the surface of the protein. PEG showed to be a good join element between the enzyme and the nanotube surface, allowing the solubilization of the nanotubes and keeping the peroxidase activity of cytochrome c. This methodology seems to be promising for the immobilization of biological molecules on nanotubes due to the simplicity of the procedure for pegylation of biomolecules and the high solubilization reached of the hybrid protein- nanotubes.

