

### Neurotransmitter detection using Surface-enhanced Raman spectroscopy from PC12 cells

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Dopamine(DA) plays one of important role in central nervous system. PC12 cells are well-known dopaminergic cells in response some chemical treatment. In this study, electrochemical depositon technique was used for gold nanopattern fabrication. PC12 cells were immobilized on nanopatterned ITO(Indium Tin Oxide) substrate. Finally, various chemical agent was treated to PC12 cells and the concentration of DA was successfully monitored by SERS and confirmed by HPLC.

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