



06/29/2011

Subject: Real-time monitoring of ligand-receptor interactions with Fluorescence Resonance Energy Transfer.

Dear Dr. Moshe Pritsker

We are submitting a manuscript titled "*Real-time monitoring of ligand-receptor interactions with Fluorescence Resonance Energy Transfer*" for publication in the *Journal of Visualized Experiments*.

In this paper, we report a novel and easy method to monitor protein-protein interactions at liposome surface using fluorescence resonance energy transfer (FRET). In the first part of manuscript, Rhodamine tagged bovine serum albumin (BSA) molecules were attached to PDA liposome and FRET was monitored. In the second part Rhodamine and biotin were tagged on liposomes surface. Small aliquots of Streptavidin were added to the liposome solution. Biotin-Streptavidin interactions were monitored using FRET between Rhodamine and PDA liposome. These interactions were observed through changes in the FRET efficiency. The main advantage of this method is the inexpensive instrumentation, real time monitoring; and it provides an easy method for the determination of protein-protein interactions.

This work should prove to be of considerable interest for immunology, biochemistry, cell- and molecular-biology along with colorimetric assay and biosensing applications.

Understanding that journal space is at an absolute premium in this most respected chemistry journal, we appreciate our manuscript being considered for publication in the *Journal of Visualized Experiments*. Please find below a list of suggested reviewers who are appropriate for reviewing this manuscript. If I can be of further assistance please contact me.

Please contact me at anytime if you need additional information.

Sincerely,

Punit Kohli
Associate Professor

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