Abstract Submitted
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Diffusion of dextran inside microtubule sample CAMELIA PRODAN[1], DEBORAH FYGENSON, UCSB — Microtubules (Mts) are the bones of the cell. Their exterior has been extensively studied but little is known about their interior. We have studied the diffusion of fluorescein labeled dextran in the presence of GDP Mts and taxol stabilized GDP Mts. The diffusion coefficient, D, of different size dextran (10 kD, 40 kD, 70 kD, 500 kD) was measured using fluorescence recovery after photo-bleaching (FRAP). If dextran was present during the assembling of Mts, D was smaller then free diffusion coefficient. When dextran was added after the assembling, D was the same as the free diffusion coefficient. For taxol stabilized Mts (0.90 fill ratio), D was also found the same as the free diffusion coefficient .

[1]membership pending

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