1067-92-365 **Roberto Munoz-Alicea*** (romual2002@hotmail.com), 1112 Columbine Ct. Apt. 2, Fort Collins, CO 80521. *A Mathematical Model for Active Transport of Gag Protein in the Cytoplasm.* Preliminary report.

We present a mathematical model for the intracellular transport of the Gag protein, a major structural component of the HIV-1 viral capsid. The model includes both diffusion and active transport mechanisms. We assume that the active transport takes place along microtubules. We use characteristic finite element methods to carry out numerical simulations. Numerical results are consistent with biological experimental data.

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