

## Supplemental Movies

Movie S1. Live cell single molecule video of CHO-K1 cell transfected with mEos2  $\alpha_v\beta_3$  imaged at 25 ms per frame for 2 min (4800 frames). Red circles indicate detected molecules. Interspersed every 10s (400 frames) is an EGFP fill which allows determination of the cell outline. Field size – 28.4 $\mu$ m x 28.4 $\mu$ m.

Movie S2. Live cell single molecule video of CHO-K1 cell transfected with  $\alpha_v$  mEos2  $\beta_3$  imaged at 25 ms per frame for 2 min (4800 frames). Red circles indicate detected molecules. Interspersed every 10s (400 frames) is an EGFP fill which allows determination of the cell outline. Field size – 28.4 $\mu$ m x 28.4 $\mu$ m