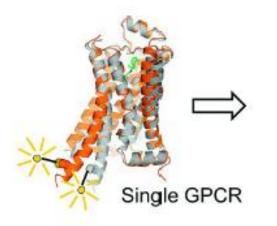
Conformational dynamics of single G protein-coupled receptors in solution

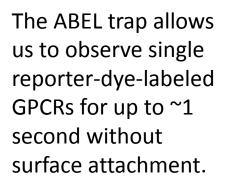
Samuel Bockenhauer, Alexandre Fuerstenberg, Xiao Jie Yao, Brian Kobilka, and W. E. Moerner

ABEL

trap



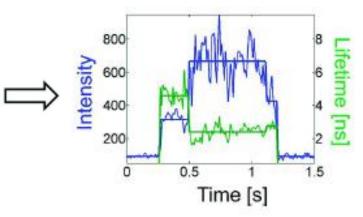
GPCRs regulate a host of cellular processes; ligand binding (green) transmits signals to the rest of the cell via conformational change.



Y(-)



Bockenhauer et al., J Phys Chem B 115, 13328 (2011)



We observe a range of conformational changes, probed by step-like changes in the intensity and lifetime of the single reporter dye. The distributions and timescales of these changes depend upon the presence and absence of bound ligand.