

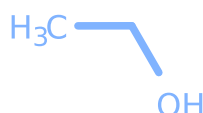
energy (H)



simulation start ○

 $dH/d\lambda$ 

simulation —

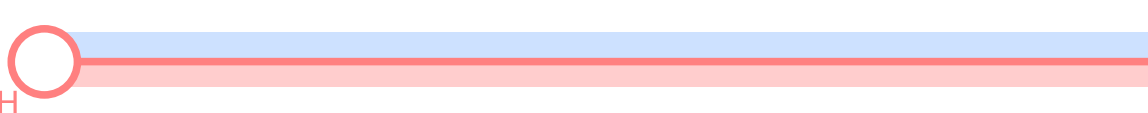
 λ State A, $\lambda = 0$ State B, $\lambda = 1$ 

simple FEP

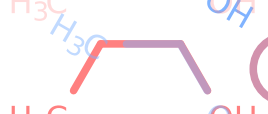
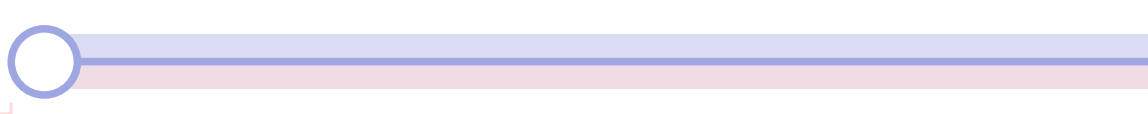
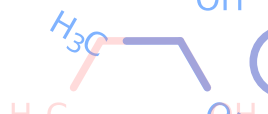


time →

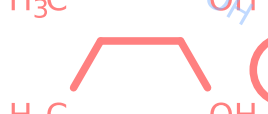
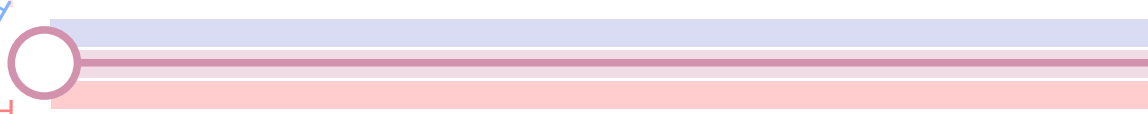
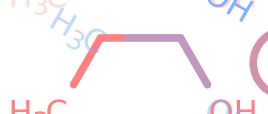
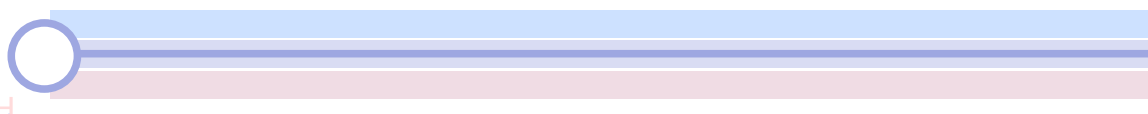
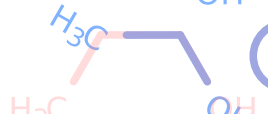
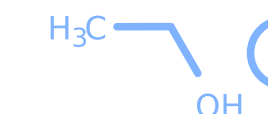
simple BAR



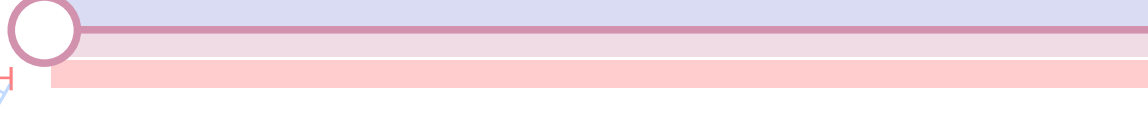
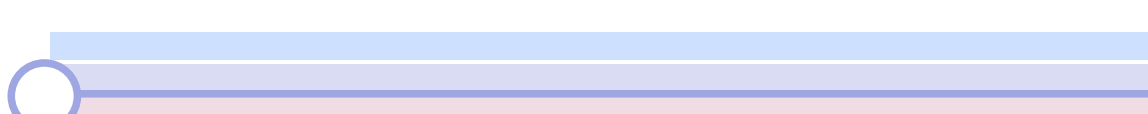
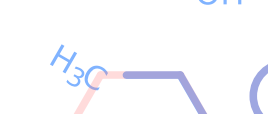
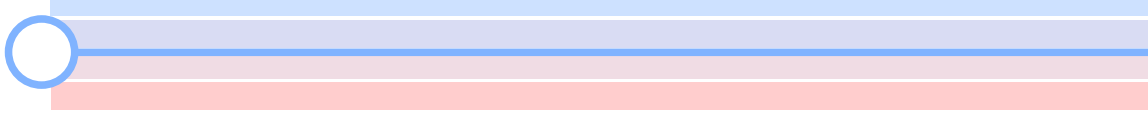
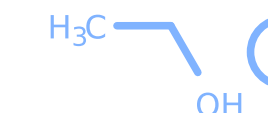
stratified FEP



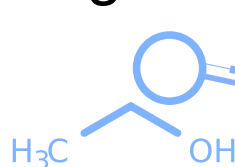
stratified BAR



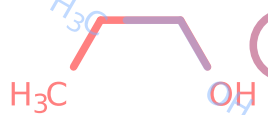
mBAR



Slow-growth TI



Discrete TI



Fast-growth TI

