

Table S3 Summary for the conformational states of individual sACE domains in our all-atom MD simulation

Glycosylated ACE (>2 μ sec)				
	A:ACE-N	A:ACE-C	B:ACE-N	B:ACE-C
run1	rapid closing (<0.1 μ sec) and stay closed	rapid closing (<0.1 μ sec) and stay closed	rapid closing (<0.1 μ sec) and stay closed	rapid closing (<0.1 μ sec) and stay closed
run2	rapid closing (<0.1 μ sec) and stay closed	rapid closing (<0.1 μ sec), then D3a slowly separated from D3b and D4 (~0.7 μ sec) to open up and stay open	rapid closing (<0.1 μ sec), then D1a slowly separated from D1b and D2 (~1.2 μ sec) to open up and stay open	rapid closing (<0.1 μ sec) and stay closed
run3	rapid closing (<0.1 μ sec) and stay closed	D3a slowly separated from D3b and D4 to open up and stay open	rapid closing (<0.1 μ sec) and stay closed	rapid closing (<0.1 μ sec) and stay closed
run4	D1a separated from D1b and D2 to open up further and stay wider open	rapid closing (<0.1 μ sec) and stay closed	rapid closing (<0.1 μ sec), then open up (~0.7 μ sec) by D1a separated from D1b and D2 and stay open	rapid closing (<0.1 μ sec) and stay closed
Non-glycosylated ACE (>1.8 μ sec)				
run1	rapid closing (<0.1 μ sec) and stay closed	rapid closing (<0.1 μ sec) and stay closed	rapid closing (<0.1 μ sec) and stay closed	stay open
run2	persistent open even wider until ~0.77 μ sec, then close and stay close	rapid closing (<0.1 μ sec) and stay closed	rapid closing (<0.1 μ sec) and stay closed	rapid closing (<0.1 μ sec), then D3a slowly separated from D3b and D4 to open up and stay open
run3	rapid closing (<0.1 μ sec), then D1a slowly separated from D1b and D2 (~0.4 μ sec) to open up and stay open	rapid closing (<0.1 μ sec) and stay closed	rapid closing (<0.1 μ sec), then open up (~0.4 μ sec) by D1a separated from D1b and D2 and stay open	rapid closing (<0.1 μ sec) and stay closed
run4	rapid closing (<0.1 μ sec), stay closed until ~1.5 μ sec, then D1a separated from D1b and D2 to open up and stay open	stay open till ~0.9 μ sec then close and stay closed	rapid closing (<0.1 μ sec) and stay closed	rapid closing (<0.1 μ sec) and stay closed
ACE monomer				
run1	rapid closing (<0.1 μ sec) and stay closed	rapid closing (<0.1 μ sec) and stay closed		
run2	rapid closing (<0.1 μ sec) and stay closed	rapid closing (<0.1 μ sec) and stay closed		
run3	rapid closing (<0.1 μ sec) and stay closed	rapid closing (<0.1 μ sec) and stay closed		