

**Table S4.**

	$R_R$	$R_{TS}$	$R_P$	$E_{TS-R}$	$E_{P-R}$
MP2/6-31G(d)	-1.83	-0.11	1.57	22.15	-5.69
MP2/cc-pVDZ	-1.83	-0.35	1.57	19.92	-7.97
B3LYP/6-31G(d)	-1.83	0.13	1.57	24.90	1.35
B3LYP/cc-pVDZ	-1.83	0.13	1.57	23.50	0.12

The reaction coordinates in Å for the reactant, transition state and product are  $R_R$ ,  $R_{TS}$  and  $R_P$ , respectively. The barrier height of the transition state  $E_{TS-R}$  and the overall reaction energy  $E_{P-R}$  are in kcal/mol.