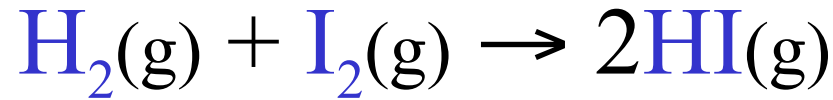


Reaction Mechanism



$$\text{rate} = k [\text{H}_2] [\text{I}_2]$$



forward rate = $k_f [\text{I}_2]$

reverse rate = $k_r [\text{I}\cdot]^2$

equilibrium $k_f [\text{I}_2] = k_r [\text{I}\cdot]^2$

$$K_{\text{eq}} = \frac{[\text{I}\cdot]^2}{[\text{I}_2]} = \frac{k_f}{k_r}$$