$S_N2$ mechanism (S-substitution, N-nucleophilic, 2-second order) is one of the two limiting mechanisms of nucleophilic aliphatic substitution at saturated carbon. It is a one-step mechanism:

A nucleophilic aliphatic substitution at saturated carbon occurring via $S_N2$ mechanism is called an $S_N2$ reaction. The rate law of an $S_N2$ reaction is:

$$\text{rate} = k [\text{substrate}][\text{nucleophile}]$$

According to the rate law, an $S_N2$ reaction is second order overall, and the concentration of both substrate and nucleophile affect the rate of reaction, which is consistent with the single-step mechanism.

see also $S_N1$ mechanism

Contributors

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