Reaction mechanism

$$2H_2O_2 \text{ (aq)} \rightarrow 2H_2O(l) + O_2(g)$$

$$\Delta G^o_{rxn} = [\ 2(-237.9)] - [2(-131.67)] = -212.46 \text{ kJ}$$

spontaneous reaction

experimental rate law: rate = $k[H_2O_2]\,[I^-]$

I^- = catalyst

increase rate of reaction

not consumed in the overall reaction

reactant in early elementary step

product in later elementary step