Standard Reduction Potentials in Biochemistry

$$\Delta G^\circ = -n\mathcal{F}\Delta E^\circ$$

Half Reaction	E'° (volts)
$\frac{1}{2}O_2 + 2H^+ + 2e^- \rightleftarrows H_2O$	0.816
$SO_4^{2-} + 2H^+ + 2e^- \rightleftarrows SO_3^{2-} + H_2O$	0.48
$NO_3^- + 2H^+ + 2e^- \rightleftarrows NO_2^- + H_2O$	0.421
cytochrome a_3 $(Fe^{3+}) + e^- \rightleftarrows$ cytochrome a_3 (Fe^{2+})	0.35
$O_2(g) + 2H^+ + 2e^- \rightleftarrows H_2O_2$	0.295
cytochrome a $(Fe^{3+}) + e^- \rightleftarrows$ cytochrome a (Fe^{2+})	0.29
cytochrome c $(Fe^{3+}) + e^- \rightleftarrows$ cytochrome c (Fe^{2+})	0.254
cytochrome c_1 $(Fe^{3+}) + e^- \rightleftarrows$ cytochrome c_1 (Fe^{2+})	0.22
cytochrome b $(Fe^{3+}) + e^- \rightleftarrows$ cytochrome b (Fe^{2+})	0.077
ubiquinone $+ 2H^+ + 2e^- \rightleftarrows$ ubiquinol	0.045
fumarate$^- + 2H^+ + 2e^- \rightleftarrows$ succinate$^-$	0.031
$2H^+ + 2e^- \rightleftarrows H_2$ (std conditions, pH 0)	0.00
oxaloacetate$^- + 2H^+ + 2e^- \rightleftarrows$ malate$^-$	-0.166
pyruvate$^- + 2H^+ + 2e^- \rightleftarrows$ lactate$^-$	-0.185
acetaldehyde $+ 2H^+ + 2e^- \rightleftarrows$ ethanol	-0.197
FAD $+ 2H^+ + 2e^- \rightleftarrows FADH_2$ (free coenzyme)	-0.219
$S + 2H^+ + 2e^- \rightleftarrows H_2S$	-0.243
lipoic acid $+ 2H^+ + 2e^- \rightleftarrows$ dihydrolipoic acid	-0.29
$NAD^+ + H^+ + 2e^- \rightleftarrows$ NADH	-0.320
$NADP^+ + H^+ + 2e^- \rightleftarrows$ NADPH	-0.320
cystine $+ 2H^+ + 2e^- \rightleftarrows$ 2 cysteine	-0.340
acetoacetate$^- + 2H^+ + 2e^- \rightleftarrows \beta-$hydroxybutyrate$^-$	-0.346
$\alpha-$ketoglutarate$^{2-} + CO_2 + H^+ + 2e^- \rightleftarrows$ isocitrate^{3-}	-0.38
$2\,H^+ + 2\,e^- \rightleftarrows H_2$ (pH 7)	-0.414
acetate$^- + 3H^+ + 2e^- \rightleftarrows$ acetaldehyde $+ H_2O$	-0.581

Source: Mostly from Loach, P.A., In Fasman, G.D. (Ed.), Handbook of Biochemistry and Molecular Biology (3rd ed.), Physical and Chemical Data, Vol. 1, pp. 123-130, CRC Press (1976). This is Table 13-3 from Voet, Voet and Pratt Fundamentals of Biochemistry 2002, or 13-7 in Nelson and Cox, Principles of Biochemistry 2008. Updated based on Nelson and Cox 2017.