

Table 4. Standard redox potentials of different electron donors of the photosynthetic light reaction.^a

Electron donor	E_o^- [mV]
$\frac{1}{2}\text{O}_2/\text{H}_2\text{O}$	+820
$\text{Fe(OH)}_3 + \text{HCO}_3^-/\text{FeCO}_3$	+200
Fumarate/Succinate	+33
$\text{HSO}_3^-/\text{S}^0$	-38
$\text{SO}_4^{2-}/\text{S}^0$	-200
$\text{SO}_4^{2-}/\text{HS}^-$	-218
$\text{Fe(OH)}_3/\text{Fe}^{2-}$	-236
S^0/HS^-	-278
$\text{HCO}_3^-/\text{acetate}$	-350
$\text{S}_2\text{O}_3^{2-}/\text{HS}^- + \text{HSO}_3^-$	-402
$\text{H}^+/\frac{1}{2}\text{H}_2$	-414
Electron acceptor	E_o^- [mV]
$\text{CO}_2/\langle\text{CH}_2\text{O}\rangle$	-434

^aTaken from Brune, 1989; Widdel et al., 1993; Thauer et al., 1977; Zehnder and Stumm, 1988.