TABLE 5. *Redox potential of electron donors and electron acceptors involved in ETP*

Redox compound	E_0' (mV)	References
SO_4^{2-}/HSO_3^-	−516	—[b]
CO_2/formate[a]	−432	—[b]
H^+/H_2	−414	—[c]
$S_2O_3^{2-}/HS^- + HSO_3^-$	−402	—[b]
Flavodoxin ox/red (E_{01}')	−371[d]	397
Ferredoxin ox/red (E_{01}')	−398[e]	157
NAD/NADH	−320	91
Cytochrome c_3 ox/red	−290	728
CO_2/acetate$^-$	−290	—[b]
S^0/HS^-	−270	—[b]
CO_2/CH_4	−244	—[b]
$FAD/FADH_2$	−220	—[f]
Acetaldehyde/ethanol	−197	—[b]
Pyruvate$^-$/lactate$^-$	−190	—[b]
$FMN/FMNH_2$	−190	—[f]
Dihydroxyacetone phosphate/glycerol-phosphate	−190	94
$HSO_3^-/S_3O_6^{2-}$	−173	—[b]
Oxaloacetate^{2-}/malate^{2-}	−172	—[b]
Flavodoxin ox/red (E_{02}')	−115[d]	397
HSO_3^-/HS^-	−116	—[b]
Menaquinone ox/red (MK)	−74	569, 685
APS/AMP + HSO_3^-	−60	594
Rubredoxin ox/red	−57	155
Acrylyl CoA/propionyl CoA	−15	232
Glycine/acetate$^-$ + NH_4^+	−10	—[b]
2-Demethylvitamin K_2 ox/red	+25	569, 250a
$S_4O_6^{2-}/S_2O_3^{2-}$	+24	—[b]
Fumarate/succinate	+33	—[b]
Ubiquinone ox/red	+113	569
$S_3O_6^{2-}/S_2O_3^{2-} + HSO_3^-$	+225	—[b]
NO_2^-/NO	+350	—[b]
NO_3^-/NO_2^-	+433	—[b]
Fe^{3+}/Fe^{2+}	+772	—[b]
O_2/H_2O	+818	—[b]
NO/N_2O	+1175	—[b]
N_2O/N_2	+1355	—[b]

[a] CO_2 rather than HCO_3^- has been shown to be the active species of "CO_2" utilized or formed by formate dehydrogenases (336, 645, 646b).

[b] Calculated from $\Delta G^{0'}$ for redox compound reduction with H_2 ($\Delta G^{0'} = -n \cdot F \cdot \Delta E_0'$, $\Delta E_0' = E_0'$ (redox compound $- E_0'$ (H^+/H_2); n = number of electrons transferred in the reaction; F [Faraday constant] = 23060.9 cal/V equivalent) (110). The $\Delta G^{0'}$ values were calculated from the ΔGf^0 values given in Table 15 (CO_2, CH_4, H_2, N_2, NO, and N_2O in the gaseous state, all other compounds in aqueous solution).

[c] At 25°C.

[d] *Peptostreptococcus elsdenii*; for E_0' of clostridial flavodoxins see (394).

[e] *Clostridium pasteurianum* ($E_{02}' = -367$ mV).

[f] The redox potential of flavin enzymes may differ by as much as 200 mV from the values of the free coenzymes.