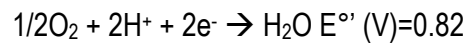


PRACTICE: OXIDATIVE PHOSPHORYLATION

21. The reactive oxygen species made in quinones during electron transport are released into the mitochondrial matrix as:

- a. O_2
- b. O_2^-
- c. O_3^-
- d. H_2O_2
- e. H_2O

22. Given the standard reduction potentials below, what is the overall standard redox potential of electron transport?



23. Calculate the energy released as one mole of electrons moves between cytochrome- a_3 and cytochrome- a_1 , within respiratory complex IV. Cytochrome- a_1 ($E^{\circ'} = 0.29V$) and Cytochrome- a_3 ($E^{\circ'} = 0.35V$)