21 Equation 1 and equation 2 show two different reactions of halide ion Q^- with concentrated sulfuric acid.

equation 1 $H_2SO_4 + Q^- \rightarrow HSO_4^- + HQ$

equation 2 $H_2SO_4 + 2Q^- + 2H^+ \rightarrow SO_2 + Q_2 + 2H_2O$

What is Q?

A Cl^- or Br^- **B** Br^- or I^- **C** Cl^- only **D** I^- only