$$\cfrac{\cfrac{[A1]_7 \quad [(A1 \to A2)]_1}{A2} \to \text{elim}_{10} \qquad \cfrac{[A1]_7 \quad [(A1 \to (A2 \to A3))]_2}{(A2 \to A3)} \to \text{elim}_{11}}{A3} \to \text{elim}_8$$

$$\cfrac{\cfrac{[A1]_7 \quad [(A1 \to A2)]_1}{A2} \to \text{elim}_{10} \qquad [(A2 \to (A3 \to A4))]_3}{(A3 \to A4)} \to \text{elim}_6$$

$$A4$$