

$$\begin{array}{c}
\frac{[A]_{(1)} \quad \frac{[(A \Rightarrow B) \wedge (B \Rightarrow C)]_{(2)} \wedge 1 \mathcal{E}}{(A \Rightarrow B)} \Rightarrow \mathcal{E}}{B} \quad \frac{[(A \Rightarrow B) \wedge (B \Rightarrow C)]_{(2)} \wedge 2 \mathcal{E}}{(B \Rightarrow C)} \Rightarrow \mathcal{E}}{\frac{C}{A \Rightarrow C} \Rightarrow \mathcal{I}_{(1)}} \\
\frac{\quad}{((A \Rightarrow B) \wedge (B \Rightarrow C)) \Rightarrow (A \Rightarrow C)} \Rightarrow \mathcal{I}_{(2)}
\end{array}$$