$$\frac{u:A\to B}{\frac{B}{(A\land C)\to B}\to^+ v:A\land C} \land^- 1$$

$$\frac{B}{(A\land C)\to B}\to^+ v:A\land C$$

$$\frac{(A\to B)\to ((A\land C)\to B)}{(A\to B)\to^+ u:A\to B}$$

Proof complete.