$$\cfrac{\cfrac{\cfrac{\cfrac{\Gamma, h \Rightarrow \Delta, h}{\Gamma, (\ulcorner h \urcorner = \ulcorner h \urcorner), h \Rightarrow \Delta, h} \; L_{wk}}{\Gamma, (\ulcorner \psi \urcorner = \ulcorner h \urcorner), h \Rightarrow \Delta, \psi} \; h = \psi}{\Gamma, (\ulcorner \psi \urcorner = \ulcorner h \urcorner) \wedge h \Rightarrow \Delta, \psi} \; R\wedge \qquad \cfrac{\cfrac{\cfrac{\Gamma, \bot \Rightarrow \Delta, h}{\Gamma, \tau(T)(\ulcorner h \urcorner) \Rightarrow \Delta, h} \; \neg h \; \underline{\mathtt{in}} \; T}{\Gamma, \tau(T)(\ulcorner \psi \urcorner) \Rightarrow \Delta, \psi} \; h = \psi}{} \; L\vee}{\cfrac{\cfrac{\cfrac{\Gamma, ((\ulcorner \psi \urcorner = \ulcorner h \urcorner) \wedge h) \vee \tau(T)(\ulcorner \psi \urcorner) \Rightarrow \Delta, \psi}{\Gamma, (((\#0 = \ulcorner h \urcorner) \wedge h) \vee \tau(T))(\ulcorner \psi \urcorner) \Rightarrow \Delta, \psi} \; \text{definition } \mathtt{subst}}{\Gamma, \tau([h,T])(\ulcorner \psi \urcorner) \Rightarrow \Delta, \psi} \; \text{definition } \tau}{\Gamma \Rightarrow \Delta, \tau([h,T])(\ulcorner \psi \urcorner) \supset \psi} \; R\supset}$$

$L\perp$ (on $\Gamma, \perp \Rightarrow \Delta, h$)

Right derivation:

$$\cfrac{\cfrac{\cfrac{\cfrac{\cfrac{\cfrac{\cfrac{\Gamma, h \Rightarrow \Delta, (\ulcorner h \urcorner = \ulcorner h \urcorner) \; R= \qquad \Gamma, h \Rightarrow \Delta, h \; \text{Logical Axiom}}{\Gamma, h \Rightarrow \Delta, (\ulcorner h \urcorner = \ulcorner h \urcorner) \wedge h} \; R\wedge}{\Gamma, h \Rightarrow \Delta, (\ulcorner h \urcorner = \ulcorner h \urcorner) \wedge h, \tau(T)(\ulcorner h \urcorner)} \; R_{wk}}{\Gamma, \psi \Rightarrow \Delta, (\ulcorner \psi \urcorner = \ulcorner h \urcorner) \wedge h), \tau(T)(\ulcorner \psi \urcorner)} \; h = \psi}{\Gamma, \psi \Rightarrow \Delta, (\ulcorner \psi \urcorner = \ulcorner h \urcorner) \wedge h) \vee \tau(T)(\ulcorner \psi \urcorner)} \; R\vee}{\Gamma, \psi \Rightarrow \Delta, ((\#0 = \ulcorner h \urcorner) \wedge h) \vee \tau(T))(\ulcorner \psi \urcorner)} \; \text{definition } \mathtt{subst}}{\Gamma, \psi \Rightarrow \Delta, \tau([h,T])(\ulcorner \psi \urcorner)} \; \text{definition } \tau}{\Gamma \Rightarrow \Delta, \psi \supset \tau([h,T])(\ulcorner \psi \urcorner)} \; R\supset}$$

$$\cfrac{\cdots \qquad \cdots}{\Gamma \Rightarrow \Delta, \tau([h,T])(\ulcorner \psi \urcorner) \leftrightarrow \psi} \; R\leftrightarrow$$