

$$\begin{array}{ccc}
 & u_A \otimes (s_A \otimes I) & \\
 \alpha_{u_A, s_A, I} \swarrow & & \searrow 1_{u_A} \otimes \rho_{s_A} \\
 (u_A \otimes s_A) \otimes I & \xrightarrow{\rho_{u_A \otimes s_A}} & u_A \otimes s_A
 \end{array}$$