

$$\begin{array}{ccc}
 & (u \otimes v)_A & \\
 (\gamma_1)_A \otimes 1_{(v)_A} \swarrow & & \searrow (\gamma_2)_A \otimes 1_{(v)_A} \\
 (u_1 \otimes v)_A & & (u_2 \otimes v)_A
 \end{array}$$