

$$\begin{array}{ccc}
 F_1(A) \otimes G_1(A) & \xrightarrow{\eta_A \otimes \eta'_A} & F_2(A) \otimes G_2(A) \\
 \downarrow F_1(f) \otimes G_1(f) & & \downarrow F_2(f) \otimes G_2(f) \\
 F_1(B) \otimes G_1(B) & \xrightarrow{\eta_B \otimes \eta'_B} & F_2(A) \otimes G_2(A)
 \end{array}$$