

$$\begin{array}{ccccccc}
Y & \xrightarrow{\text{ru}_Y^{-1}} & Y \otimes 1 & \xrightarrow{\text{id}_Y \otimes \text{coev}_X} & Y \otimes (X \otimes X^v) & \xrightarrow{\text{as}^{-1}} & (Y \otimes X) \otimes X^v \\
& & & & & & \xrightarrow{f \otimes \text{id}_{X^v}} & (Z \otimes X) \otimes X^v \\
& & & & & & & \xrightarrow{\text{as}} & Z \otimes (X \otimes X^v) \\
& & & & & & & \xrightarrow{\text{id}_Z \otimes \text{br}} & Z \otimes (X^v \otimes X) \\
& & & & & & & \xrightarrow{\text{id}_Z \otimes \text{ev}_X} & Z \otimes 1 \\
& & & & & & & \xrightarrow{\text{ru}_Z} & Z
\end{array}$$