

$$\mathbf{1}_{\mathbf{D}} \otimes_{\mathbf{D}} F(X) \xrightarrow{\text{iso} \otimes_{\mathbf{D}} \text{Id}_{F(X)}} F(\mathbf{1}_{\mathbf{C}}) \otimes_{\mathbf{D}} F(X)$$

$$F(X) \otimes_{\mathbf{D}} \mathbf{1}_{\mathbf{D}} \xrightarrow{\text{Id}_{F(X)} \otimes_{\mathbf{D}} \text{iso}} F(X) \otimes_{\mathbf{D}} F(\mathbf{1}_{\mathbf{C}})$$

$$\begin{array}{ccc} \downarrow & & \downarrow \\ F(X) & \xleftarrow{F(\text{lu}_X^{\mathbf{C}})} & F(\mathbf{1}_{\mathbf{C}} \otimes_{\mathbf{C}} X) \end{array}$$

$$\begin{array}{ccc} \downarrow & & \downarrow \\ F(X) & \xleftarrow{F(\text{ru}_X^{\mathbf{C}})} & F(X \otimes_{\mathbf{C}} \mathbf{1}_{\mathbf{C}}) \end{array}$$