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

$$\downarrow \qquad \qquad \downarrow \qquad \qquad \downarrow \qquad \qquad \downarrow$$

$$F(X) \longleftarrow F(\mathbf{1_{C}}) \qquad F(\mathbf{1_{C}} \otimes_{\mathbf{C}} X) \qquad F(X) \longleftarrow F(\mathbf{1_{C}}) \qquad F(X) \otimes_{\mathbf{D}} F(\mathbf{1_{C}})$$