$$c_{1} \otimes c_{2} \xrightarrow{f_{1} \otimes f_{2}} d_{1} \otimes d_{2}$$

$$br_{c_{1},c_{2}} \downarrow \qquad \qquad \downarrow br_{d_{1},d_{2}}$$

$$c_{2} \otimes c_{1} \xrightarrow{f_{2} \otimes f_{1}} d_{2} \otimes d_{1}$$