$$(a \otimes b) \otimes (c \otimes d)$$

$$((a \otimes b) \otimes c) \otimes d$$

$$(a \otimes (b \otimes (c \otimes d)))$$

$$\alpha_{a,b,c} \otimes \mathrm{id}_{d}$$

$$(a \otimes (b \otimes c)) \otimes d$$

$$\alpha_{a,b,c,d}$$

$$\alpha_{a,b,c,d}$$

$$\alpha_{a,b,c,d}$$

$$\alpha_{a,b,c,d}$$

$$\alpha_{a,b,c,d}$$