$$(x, y, z) \xmapsto{\quad \mu \times 1 \quad} (x \cdot y, z)$$

$$\downarrow {\scriptstyle 1 \times \mu} \qquad\qquad\qquad \downarrow {\scriptstyle \mu}$$

$$(x, y \cdot z) \xmapsto{\quad \mu \quad} x \cdot (y \cdot z) = (x \cdot y) \cdot z$$

$$M \times M \times M \xrightarrow{\quad \mu \times 1 \quad} M \times M$$

$$\downarrow {\scriptstyle 1 \times \mu} \qquad\qquad\qquad\quad \downarrow {\scriptstyle \mu}$$

$$M \times M \xrightarrow{\quad \mu \quad} M$$