$$0 \longrightarrow K \xrightarrow{i} P \xrightarrow{p} S \longrightarrow 0$$

$$\downarrow^{g'} \qquad \downarrow \qquad \parallel$$

$$0 \longrightarrow M_{\beta} \xrightarrow{f_{\beta}} M_{\beta+1} \longrightarrow S \longrightarrow 0$$

$$\downarrow^{g'} \qquad \downarrow$$

$$\downarrow^{g'} \qquad \downarrow$$

$$\downarrow^{g'} \qquad \downarrow$$

$$\downarrow^{g'} \qquad \downarrow$$