$$\begin{array}{ccc}
& \Delta^1 \times \Lambda^n_k & \\
& \downarrow & \\
\Lambda^n_k & \Box \xrightarrow{\quad ? \quad} & \Lambda^n_k \\
\downarrow & \downarrow & \downarrow \\
\Delta^n \xrightarrow{\iota_1} \Delta^1 \times \Delta^n \xrightarrow{p} & \Delta^n
\end{array}$$

ι_1

$p|_{\Delta^1 \times \Lambda^n_k}$