

$$\begin{aligned}
P_A(sk_i, pk_r) &\hat{=} \nu n_a. \text{ out}(c, \text{aenc}(\langle pk(sk_i), n_a \rangle, pk_r)). \\
&\text{ in}(c, x). \\
&\text{ if fst(ade}(c, sk_i)) = n_a \text{ then} \\
&\text{ let } x_{nb} = \text{snd(ade}(c, sk_i)) \text{ in} \\
&\text{ out}(c, \text{aenc}(x_{nb}, pk_r))
\end{aligned}$$