

$$\text{Exp}_{\text{ENC}}^{\text{kr-1kca}}(\mathbb{A})$$

$$k^* \leftarrow_s \text{Kg}$$

$$m \leftarrow_s \mathcal{M}$$

$$c \leftarrow \text{Enc}_{k^*}(m)$$

(m, c)

\mathbb{A}

\hat{k}

$$\text{Adv}_{\text{ENC}}^{\text{kr-1kca}}(\mathbb{A}) = \Pr[k^* = \hat{k}]$$