

# Differentiating between crRNA and sgRNA

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**sgRNA is a combination of the targeting crRNA and scaffold tracrRNA into a single oligonucleotide**

Successful CRISPR experiments involve the design and cooperation of numerous different reagents and considerations, like the gRNA, choice of [Cas Nuclease species](#), sub-type, or [PAM sequence](#). gRNA itself is comprised of two functional regions:

- **CRISPR RNA (crRNA)**, which targets the gene of interest
- **Trans activating CRISPR RNA (tracrRNA)**, which operates as a scaffold for binding Cas Nuclease and forming the ribonucleoprotein.

For convenience, scientists have created fusions of these two RNA elements into a single guide **RNA (sgRNA)**.

Under **Product Type**, you can search for gRNA which includes sgRNA, crRNA, and sequences we've detected in the literature. Alternatively, you can select either subtype and exclude sequence-only data altogether.

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