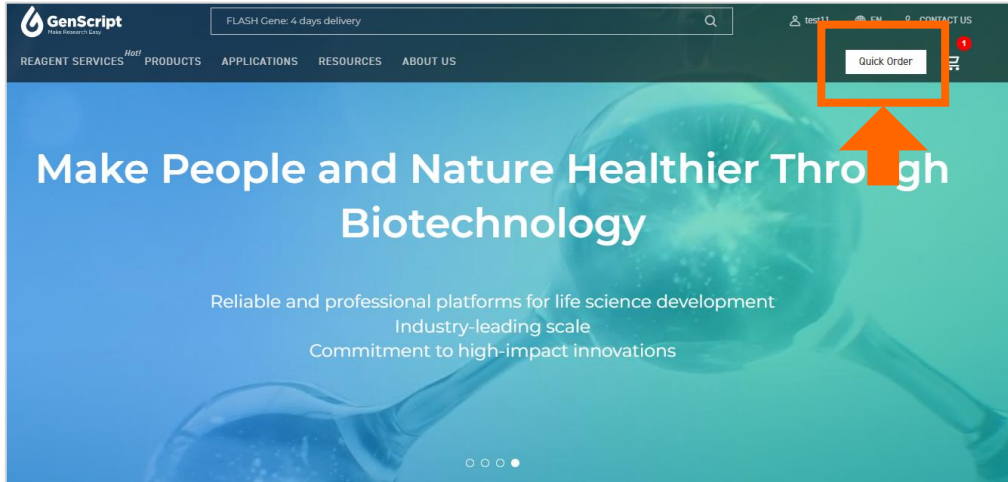


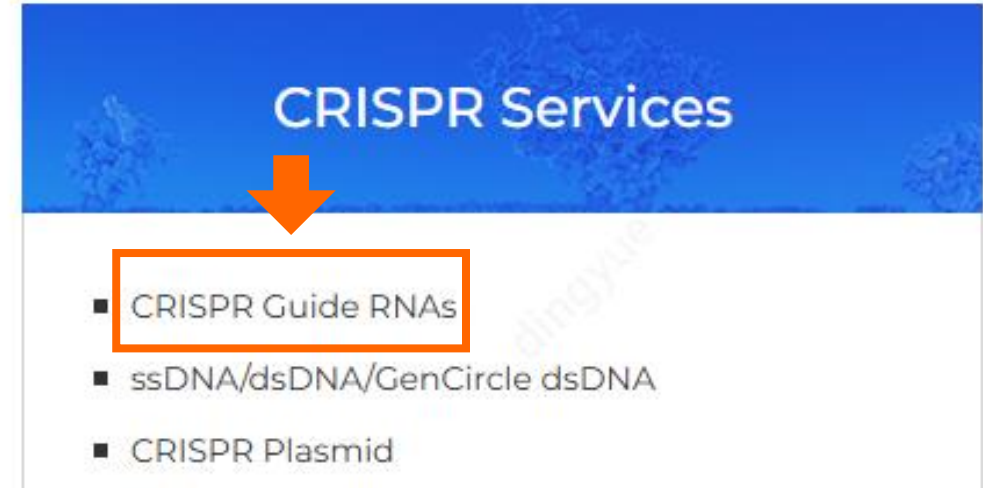
User Guide for Custom gRNA Online Ordering

On the [GenScript website](#): ① Select “**Quick Order.**” ② Select “**CRISPR Guide RNAs**” under CRISPR services. ③ Register an account or log in.

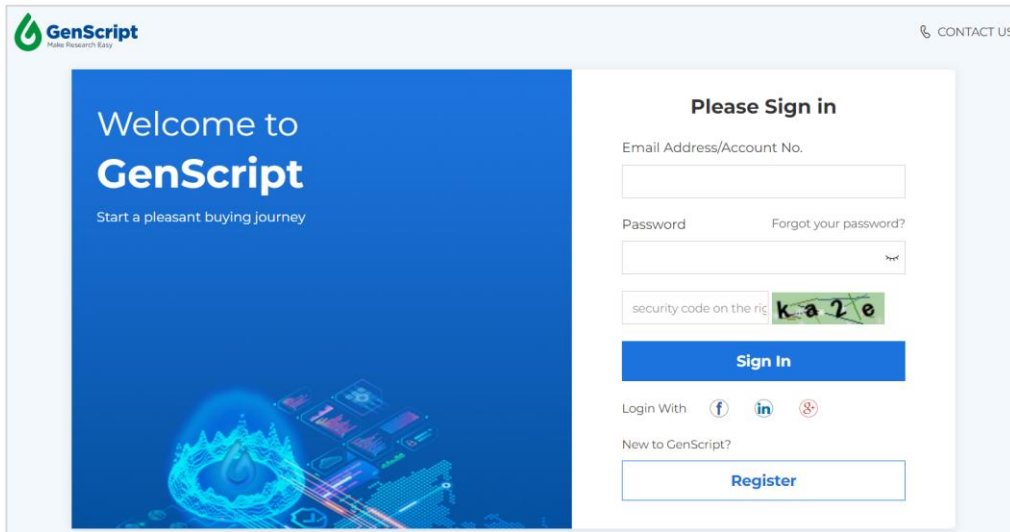
①



②



③



Step 1. Enter order requirements

- ① In **Order Information**: select the editing system and desired delivery format for all items in your order.
- ② For **Bulk Orders** (Optional): Download the bulk order template, enter each sequence with a unique identifier, save the completed file, and upload it.

Order Information

1

* Editing System ⓘ: Cas9 sgRNA ▼

* Delivery Format: Dry Powder ▼

* Format: Single Tubes ▼

96-well plate display area
(shown when 96-well plates are selected)

Bulk Order

2

Download Template Upload Template

Drag & Drop or Click [Choose Files](#)

Step 2. Enter gRNA sequences and specifications

- ① For CRISPR/Cas9 sgRNA (97-103 nt) or CRISPR/Cas12a crRNA (40-49 nt): Enter the guide RNA sequence *without* the scaffold. The system will add it automatically. Review the full sequence in the final output.
- ② For pegRNA (110-266 nt): Enter the spacer and RTT+Edit+PBS sequences. The scaffold will be added automatically. Review the full sequence in the final output.
- ③ For custom gRNA (up to 266 nt): Enter the *entire* sequence, including the scaffold.

Note: If you are requesting custom modifications and/or a custom scaffold for any gRNA type, select **Custom gRNA** under *Editing System*.

Editing system = Cas9 sgRNA or Cas12a (cpf1) crRNA

	* Name ↓ ⓘ	* Input Sequence 📄 ⓘ ?	Length ⓘ	* Final sequence ⓘ
1		①		
2				
3				

Editing system = Custom gRNA

	* Name ↓ ⓘ	* Input Sequence 📄 ⓘ ?	Length	Modification ⓘ	* Final sequence ⓘ
1		③		+	
2				+	
3				+	

Editing system = Prime Editing

	* Name ↓ ⓘ	* Input protospacer sequence 📄 ⓘ ?	* Input RTT+Edit+PBS sequence 📄 ⓘ ?	* 3' Extension 📄 ⓘ ?	* Default Modification 📄 ⓘ ?	* Final sequence ?
1		②		Yes ▾	Yes ▾	
2				Yes ▾	Yes ▾	
3				Yes ▾	Yes ▾	

Step 3. Add modifications (optional)

- **Cas9 sgRNA:** Default modifications* are included.
- **Cas12a crRNA:** Modifications are not included by default, as they may reduce efficiency. However, 2'-O-methyl and phosphorothioate modifications can be added at no extra cost**
- **pegRNA:** Default modifications* are included but can be removed upon request.
- **custom gRNA:** Modifications are not included by default. 2'-O-methyl and phosphorothioate modifications can be added at no extra cost. Other custom modifications can be added at an additional cost.

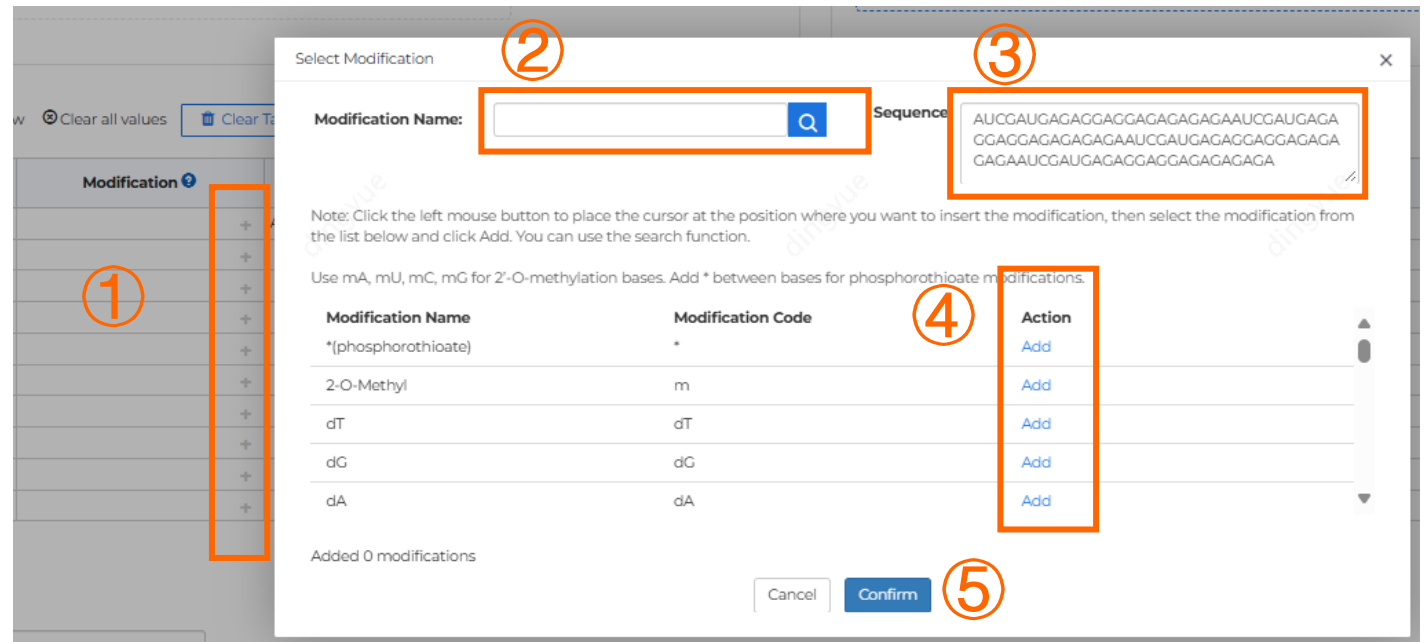
* Default modifications: 2'-O-methyl and phosphorothioate at both the 5' and 3' ends to enhance stability.

2'-O-methyl (first 3 bases) at the **5' end of crRNA may reduce Cas12a activity ([McMahon et al., 2018](#); [Rozners, 2022](#); [Ha et al., 2020](#)).

2'-O-methyl (last 3 bases) at the **3' end** is generally well-tolerated and does not negatively affect editing efficiency ([McMahon et al., 2018](#); [Ha et al., 2020](#)). One study also showed this modification reduces Cas12a's off-target binding while maintaining high affinity for on-target DNA ([Ke et al., 2022](#))

How to add custom modifications

- ① Click the "+" icon in the **Internal Modification** column.
- ② Use the search bar to find your desired modification.
- ③ Place your cursor at the target location in the sequence
- ④ Select the modification and click **"Add."**
- ⑤ Click **"Confirm"** to finalize your changes.



Step 4. Confirm price and production time

- ① **Verify** the list price for each item.
- ② **Apply** a contract code or coupon if applicable. You may also enter a promo code after adding items to the cart.
- ③ **Review** the estimated production time and order total.
- ④ **Click** “Add to Cart” and proceed to checkout.

	*Name ↓ ⊕	*Input Sequence ⊕ ⊖ ⊕	Length	*Final sequence ⊕	*Purification ⊕ ⊖	*Quantity ⊕ ⊖	*Aliquoting Into ⊕ ⊖	Price	Option
1	1	AUCCGAGAGAGGAGAGAG	18 nt	mA*mU*mC*rGrArGrArGrArGrArGrArGrArGrUrUrU ⊕	EasyEdit	2 nmol	1	€79.00	⊖
2	2	AUCCGAGAGAGGAGAGAG	18 nt	mA*mU*mC*rGrArGrArGrArGrArGrArGrArGrUrUrU ⊕	SafeEdit	2 nmol	1	€119.00	⊖
3									⊖
4									⊖
5									⊖
6									⊖
7									⊖
8									⊖
9									⊖
10									⊖

Add rows

If you have any special requirements, for example adding any modifications to the RNA sequence, please describe them here.

Add-on Items (Custom Primer for Assessing Editing Efficiency) ^

②

Contract Save: €0.00

Coupon Save: €0.00

Discount Details

③

Production Time: 5 Business Days

Total Amount: €214.22

④

Add To Cart