

# Dharmacon<sup>TM</sup> CRISPRmod MS2 tracrRNA

This document is specific to Catalog No: U-102005-05, No: U-102005-20, and No: U-102005-50.

## Product Description

- CRISPRmod MS2 tracrRNA is a single-stranded, chemically synthesized, HPLC-purified RNA molecule custom made for the CRISPRa SAM system (Konermann, 2015).
- Design is based on the published, optimized *S. pyogenes* tracrRNA sequence (Jinek, 2012) with an added MS2 aptamer sequence on stem loop 2.
- Chemically modified for improved nuclease resistance and compatible with Edit-R<sup>TM</sup> CRISPRa crRNA.
- Oligo identity is confirmed by mass spectrometry.

## Shipping and Storage

- CRISPRmod MS2 tracrRNA is shipped at ambient temperature (~23 °C) as lyophilized RNA. It will appear as a clear or fluffy white substance. Under these conditions, it is stable for at least four weeks.
- Upon receipt, the Edit-R SAM tracrRNA should be stored at –20 °C to –80 °C. Under these conditions, the reagents are stable for at least one year.

## Resuspension

- CRISPRmod MS2 tracrRNA should be resuspended in nuclease-free 10 mM Tris-HCl Buffer pH 7.4 (Cat. #B-006000-100) to the desired final concentration.
- Upon resuspension, aliquot the MS2 tracrRNA into small volumes and store at –20 °C to –80 °C in a manual defrost or non-cycling freezer. For best results, limit freeze-thaws of each tube to no more than five events. Under these conditions, MS2 tracrRNA is stable for at least one year.

## For more information

To find the contact information in your country for your technology of interest, please visit us at [horizondiscovery.com/contact-us](http://horizondiscovery.com/contact-us)

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## Handling Precautions

Oligonucleotides are susceptible to enzymatic degradation by nucleases and to chemical degradation by extreme pH and temperature. Always wear gloves and maintain nuclease-free conditions. Never attempt to handle the RNA in its lyophilized form.

**Table 1. Resuspension volumes for Edit-R SAM tracrRNA**

Edit-R SAM tracrRNA Cat. No.	Amount of Edit-R SAM tracrRNA	Volume of Tris Buffer for 100 µM stock
U-102005-05	5 nmol	50 µL
U-102005-20	20 nmol	200 µL
U-102005-50	50 nmol	500 µL

## Technical Considerations

- For resuspension of CRISPRmod MS2 tracrRNA follow the Dharmacon synthetic guide RNA resuspension [protocol](#).
- For addition of CRISPRmod MS2 tracrRNA to the wells of an CRISPRmod CRISPRa crRNA Library, follow the [protocol](#) found in the Dharmacon arrayed crRNA libraries guide.
- For efficient crRNA: MS2 tracrRNA delivery, we recommend [DharmaFECT<sup>TM</sup> transfection reagents](#).