

Dharmacon™

RNAi, Gene Expression & Gene Editing

siGENOME™ and ON-TARGET_{plus}™ siRNA Reagents

Product Description:

- Pooled and individual siRNAs designed using the SMARTselection™ algorithm to silence specific target genes
- ON-TARGET_{plus} reagents are modified with a patented modification to enhance specificity
- Annealed double-stranded RNA oligonucleotides
- 3'-UU overhangs on both strands
- 5'-Phosphate on antisense strand
- Mass of each strand confirmed by MALDI-TOF mass spectrometry

Product	Description	Cat. Number
siGenome SMARTpool ON-TARGET _{plus} SMARTpool™	One tube containing a mixture of four SMARTselection designed siRNAs targeting one gene Sequence information provided	M-XXXXXX-XX L-XXXXXX-XX
siGENOME Set of 4 siGENOME Set of 4 Upgrade siGENOME Individual Duplex	Individual SMARTselection-designed siRNA(s) from corresponding SMARTpool reagent Sequence information provided	MQ-XXXXXX-XX MU-XXXXXX-XX D-XXXXXX-XX
ON-TARGET _{plus} Set of 4 ON-TARGET _{plus} Set of 4 Upgrade ON-TARGET _{plus} individual Duplex	Individual SMARTselection-designed siRNA(s) from corresponding ON-TARGET _{plus} SMARTpool reagent Sequence information provided	LQ-XXXXXX-XX LU-XXXXXX-XX J-XXXXXX-XX
Custom SMARTpool	One tube containing 50 nmol of mixture of four SMARTselection-designed siRNAs targeting one gene Sequence information provided	M-XXXXXX-XX
Custom SMARTpool PLUS	One tube containing 50 nmol of a mixture of four SMARTselection-designed siRNAs targeting one gene and 5 nmol of each individual duplex Sequence information provided	Q-XXXXXX-XX
5x siRNA Buffer	300 mM KCl, 30 mM HEPES-pH 7.5, 1.0 mM MgCl ₂	B-002000-UB

Functional Guarantee:

siGENOME and ON-TARGET_{plus} siRNA reagents (SMARTpool and three of four individual siRNAs) are guaranteed to silence target gene expression by at least 75% at the mRNA level when used under optimal delivery conditions (confirmed using validated positive control and measured at the mRNA level 24 to 48 hours after transfection using 100nM siRNA).

Shipping and Storage:

- siRNA reagents are shipped as dry pellets at room temperature (23 °C). Under these conditions, they are stable for at least four weeks.
- Upon receipt, siRNA reagents should be stored at -20 °C to -80 °C. Under these conditions, they are stable for at least one year.
- siRNA should be resuspended in RNase-free solutions. We recommend 1x siRNA buffer (diluted from 5x siRNA buffer – Dharmacon Products Cat. #B-002000-UB-100). RNase-free water (for short-term storage) is also appropriate for resuspension of concentrated stocks (such as 20-100 μM). Alternatively, an RNase-free buffer (pH 7.3-7.6) may be used such as PBS (Fisher Cat. #NC9826748)
- Upon resuspension, aliquot the siRNA into small volumes and store at -20 °C to -80 °C. For best results, limit freeze-thawing of each tube to no more than five events. Under these conditions, the siRNA is stable for at least six months.



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Related Products:

- It is recommended to include a positive and negative control, such as Dharmacon RNAi Control reagents, in every RNAi experiment. For more information, go to gelifesciences.com/dharmacon/rnai-solutions.
- DharmaFect siRNA Transfection Reagents are available in four formulations that are optimized for transfecting siRNA into a wide variety of cell lines. For more information, go to gelifesciences.com/dharmacon/dharmafect.

Accompanying Documents:

Basic siRNA resuspension protocol

Supplemental Documents:

Go to [here](#) to find:

- Basic and cell-line specific transfection protocols
- siRNA Recommended Reading List
- SMARTpool Journal Citations

References:

References detailing the development of the SMARTselection algorithm:

1. Khvorova, A., A. Reynolds, et al. *Cell*, 2003. 115(1): p. 209-216.
2. Reynolds, A., D. Leake, et al. *Nature Biotechnology*, 2004. 22(3): p. 326-330.

For additional RNAi references please refer to the siRNA Recommended Reading List, [here](#).

Publication Reference Guide:

When referencing the use of Dharmacon siRNA reagents, please include the following information: product name (either siGENOME SMARTpool, ON-TARGET*plus* SMARTpool, Individual Duplex, or Custom SMARTpool) catalog number, GE Healthcare Dharmacon Inc., Lafayette, CO.

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Customer Support: cs.dharmacon@ge.com
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1.800.235.9880; 303.604.9499 if you have any questions.