

Welcome to the IDT Web Site!

Thank you for choosing Integrated DNA Technologies to place your order! This Quick Start Guide is designed to provide you with information about IDT's Dicector product line and to highlight the basic steps for ordering siRNA Dicector Duplexes and siRNA Dicector TriFECTa Kits.

Getting Started

You can login to IDT's web site immediately at the main page or you can proceed directly to the Dicector siRNA TriFECTa Kit page and login later during the ordering process.

- 1 To **login** immediately, open IDT's web site at **www.idtdna.com**, enter your **Login ID** and **Password**, then click **GO**.
- 2 On the **Order** page, select **SciTools** from the headings at the top of the page, then on the **IDT SciTools** order screen, select **TriFECTa RNAi Kits**.
- OR -
- 3 To proceed directly to the Dicector siRNA TriFECTa Kits ordering page and login at a later time, on the main IDT web page, click **SciTools**, then on the **IDT SciTools** order screen, select **TriFECTa RNAi Kits**.

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An Introduction to Dicer siRNA TriFECTa Kits and Duplexes

What is a TriFECTa RNAi Kit?

A **TriFECTa RNAi Kit** is an IDT product that contains three **Dicer-Substrate RNA duplexes** that target a specific gene transcript and are selected from a predesigned set of duplexes developed from the RefSeq collection of human, mouse and rat genes, as well as other organisms, in Gen Bank. The kit also contains positive and negative control duplexes, a TYE™ 563 labeled transfection control duplex and IDT Duplexing buffer.

What are Dicer-Substrate RNAs?

Dicer-Substrate RNAs are chemically synthesized **RNA duplexes** that are optimized for **Dicer** processing and show increased potency when compared with 21-mer duplexes.

What is Dicer and how does it relate to TriFECTa RNAi Kits?

In cells, small interfering RNAs (siRNAs) are produced by enzymatic cleavage of long dsRNAs by the **RNase-III class endoribonuclease Dicer**. The siRNAs associate with the RNA Induced Silencing Complex (**RISC**) in a process that is facilitated by **Dicer**. **Dicer-Substrate RNAi** methods take advantage of the link between **Dicer** and **RISC** loading that occurs when RNAs are processed by **Dicer**.

What are Traditional 21-mer siRNAs?

Traditional 21-mer siRNAs are chemically synthesized **RNA duplexes** that mimic **Dicer** products and bypass the need for **Dicer** processing.

How was IDT's TriFECTa RNAi Kit collection of 27-mer sites chosen?

The **IDT TriFECTa collection of 27-mer sites** was chosen by a rational design algorithm that integrates both traditional 21-mer siRNA design rules as well as new 27-mer design criteria. In addition, analysis was performed to ensure that the chosen sites do not target alternatively spliced exons and do not include known SNPs. These sequences are therefore optimized at several levels.

Search Target Data Entry Methods

1 There are four Entry Types available for entering the information needed. Choose **one** of the following **Entry Types**:

No.	Entry Type
1.	Gene Symbol
2.	Accession Number
3.	Gene Description
4.	IDT Catalog Number

2 Each Entry Type has two options for entering order information. Choose **one** of the following **Entry Methods**:

Type of Entry Method	Description of Entry Method
A. Simple Query Method	Use the Simple Query Method to enter one selection only for either the Gene Symbol, Accession Number, Gene Description or IDT Catalog Number
B. Complex Query Method	Use the Complex Query Method to enter more than one Gene Symbol, Accession Number, Gene Description or IDT Catalog Number

NOTE: Complex Queries should be entered by comma delimited methods or as specified for each type.

3 Review the examples shown below and then choose the type of **Entry** and the **Method** that best suits your order:

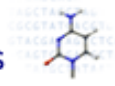
Entry Type	Entry Method	Examples
1. Gene Symbol	A. Enter By Simple Query	A. Example - ADAR
	- OR -	- OR -
	B. Enter by Complex Query*	B. Example* - ADAR, RPF1, RBMS3, SNAOC1
*Complex Queries support comma delimited Official Gene Symbols for Reference.		
2. Accession Number	A. Enter by Simple Query	A. Example - NM_015840
	- OR -	- OR -
	B. Enter by Complex Query*	B. Example* - NM_15940, NM_000036, NM_001921, NM_206965
*Complex Queries support comma delimited Reference Sequence Accession Numbers.		
3. Gene Description	A. Enter by Simple Query	A. Example - kinase
	- OR -	- OR -
	B. Enter by Complex Query*	B. Example* - (kinase NOT tyrosine) AND (inhibit OR bind)
*Complex Queries support parenthetically nested Boolean logic with the terms AND, OR and NOT in capital letters.		
4. IDT Catalog Number	A. Enter by Simple Query	A. Example - HSC.RNAI.N000102.1
	- OR -	- OR -
	B. Enter by Complex Query*	B. Example* - HSC.RNAI.N000102.1, HSC.RNAI.N000103.1, HSC.RNAI.N000104.1
*Complex Queries support comma delimited IDT Catalog Numbers.		

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Entering Initial Search Criteria for Dicector siRNA TriFECTa Kits and Duplexes

On the PreDesigned Oligo Sets page, you will need to select the reagent and transcript type for your order, choose the Splice-form options you want, select the organism(s) of interest and enter your search target information. If you need additional information on entering your search target, refer to the section in this Quick Start Guide titled: “[Search Target Data Entry Methods](#)”.

Step 1 - Selecting the Reagent and Transcript Type for your Order

PreDesigned Oligo Sets  **Quick Start Guide**
Catalog Version: 4

Gene Search Criteria

1 Select reagent and transcript type **3 Enter the search target in ONE of the fields below**

2 Select the organism of interest

SEARCH

- 1 On the **PreDesigned Oligo Sets** page, under **Gene Search Criteria**, in the **Select Reagent and Transcript Type** box, select the **Reagent Type** from the following options:

Reagent Type	Description
All	Returns results for siRNA-Dicector Duplexes and siRNA-Dicector-TriFECTa Kits.
siRNA-Dicector-Duplexes	Returns results only for siRNA-Dicector-Duplexes.
siRNA-Dicector-TriFECTa Kits	Returns results only for siRNA-Dicector-TriFECTa Kits

- 2 Then, in the **Splice-Form check boxes**, place a **check** in **one or both** of the boxes for the options you want to appear in your Predefined Results:

Splice-Form Type	Description
Splice-Form Common	This method is designed to target regions common to multiple splice-forms or when a gene has only one known mature transcript.
Splice-Form Specific	This method is designed to target a specific transcript when multiple transcripts exist.

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Entering Initial Search Criteria - Continued

Step 2 - Selecting the Organism of Interest

1 Under **Gene Search Criteria**, select the **Organism of Interest** from the available options:

Note To select **more than one organism** at a time, press the **Ctrl** key and click the items you want.

Genome Name	Description of Genome
All	Selecting All will return results for all eight Genome options.
Bos_taurus	Selecting Bos_taurus will return results for the Cow Genome.
Canis_familiaris	Selecting Canis_familiaris will return results for the Dog Genome.
Danio_rerio	Selecting Danio_rerio will return results for the Zebra Fish Genome.
Gallus_gallus	Selecting Gallus_gallus will return results for the Chicken Genome.
Homo_sapiens	Selecting Homo_sapiens will return results for the Human Genome.
Mus_musculus	Selecting Mus_musculus will return results for the Mouse Genome.
Pan_troglodytes	Selecting Pan_troglodytes will return results for the Chimpanzee Genome.
Rattus_norvegicus	Selecting Rattus_norvegicus will return results for the Rat Genome.

Step 3 - Entering your Search Target Criteria

1 Choose one of the following methods to enter your **Search Target (Entry Type)** and enter your information:

Note For more information about the methods used to enter your **Search Target**, refer to the section in this Quick Start guide titled "Search Target Data Entry Methods" for examples of each entry method.

Search Target (Entry Type)	Description
Gene Symbol	Enter the Gene Symbol for the gene you are searching for. To enter more than one Gene Symbol, list each symbol separated by a comma.
Accession Number	Enter the Accession Number. To enter more than one Accession Number, list each number separated by a comma.
Gene Description	Enter the Gene Description or use the Boolean method to enter your Gene information. You can enter more than one description by separating the information with the terms AND, OR and NOT in capital letters.
IDT Catalog Number	Enter the IDT Catalog Number associated with your selection. To enter more than one IDT Catalog Number, list each number separated by a comma.

Step 4 - Completing your Search Criteria Information

1 To complete your Search Criteria Information and begin the Search, click the **Search** button.

Your results appear on the **Predesigned Results** page.

Note Please note: It may take several minutes to display your results.

Customizing the Display Settings for PreDesigned Results

After entering your search criteria, the **PreDesigned Results** screen appears showing results that matched your selections. The page opens in expanded view showing all results for your search. If you want to review the results one at a time, you can customize the Display Settings by following the steps shown below.

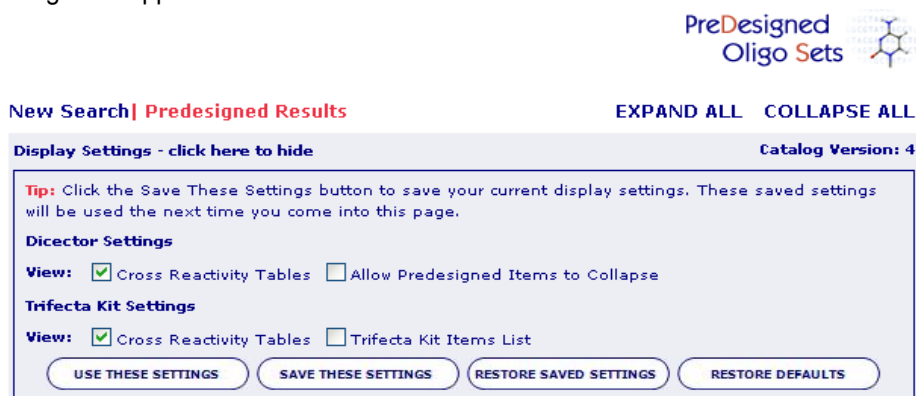
Note If you are not logged in, you will only see the options to “Use These Settings” or “Restore Defaults”. To permanently save your **Settings**, you must be **logged in**.

Setting Options for Reviewing PreDesigned Results

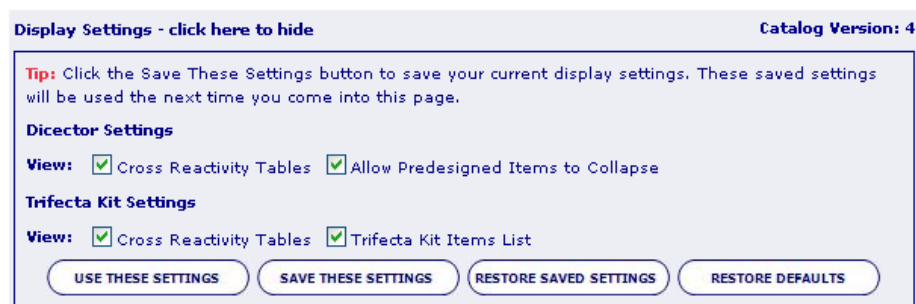
- 1 On the **PreDesigned Oligo Sets** page, under **PreDesigned Results**, click **Display Settings**.



The Display Settings box appears with the basic default selections.



- 2 In the **Display Settings** box, place a **check** in the check box(es) for the **Dicector Settings** and **Trifecta Kit Settings** you want your results to include.



- 3 To save your **Settings**, click **Save These Settings**.
- 4 To restore the **Default Settings**, click **Restore Defaults**.
- 5 To use the **Settings** for viewing this order only, click **Use These Settings**.
- 6 To restore **Saved Settings**, click **Restore Saved Settings**.
- 7 To expand all **PreDesigned Results**, click **Expand All** at the top right of the PreDesigned Results page.
- 8 To collapse all **PreDesigned Results**, click **Collapse All** at the top right of the PreDesigned Results page.
- 9 When you have saved your **Settings**, click **Display Settings** again to hide your selection choices.

Note If you want to review your PreDesigned Results one at a time, be sure the check box to Allow PreDesigned Items to Collapse is checked.

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Sorting Results by Accession Number, Symbol or Organism

The Predesigned Results page shows all the results for your search criteria either in the original default format or according to the customized display settings you have chosen. When viewing your results, you can sort the information for each result by Accession Number, Symbol or Organism.

Step 1 - Sorting Results by Accession Number in Ascending/Descending Order

- 1 To sort Results by **Accession Number**, on the **Predesigned Results** page, click directly on the heading: **Accession Number**.

Predesigned Result 1 of 9

Accession Nbr: NM_001025107 **Symbol:** ADAR **Organism:** Homo_sapiens
Description: adenosine deaminase, RNA-specific

- 2 To **reverse** the order from ascending/descending, click directly on the **Accession Number** heading again.

Step 2 - Sorting Results by Symbol in Ascending/Descending Order

- 1 To sort results by **Symbol**, on the **Predesigned Results** page, click directly on the heading: **Symbol**.

Predesigned Result 1 of 9

Accession Nbr: NM_001025107 **Symbol:** ADAR **Organism:** Homo_sapiens
Description: adenosine deaminase, RNA-specific

- 2 To **reverse** the order from ascending/descending, click directly on the **Symbol** heading again.

Step 3 - Sorting Results by Organism in Ascending/Descending Order

- 1 To sort results by **Organism** name, on the **Predesigned Results** page, click directly on the heading: **Organism**.

Predesigned Result 1 of 9

Accession Nbr: NM_001025107 **Symbol:** ADAR **Organism:** Homo_sapiens
Description: adenosine deaminase, RNA-specific

- 2 To **reverse** the order from ascending/descending, click directly on the **Organism** heading again.

New Search | **Predesigned Results**

EXPAND ALL COLLAPSE ALL

Display Settings - [click here to view](#)

Catalog Version: 4

Tip: Click Display Settings above to change the displayed content of this page.

Predesigned Result 1 of 9

Accession Nbr: NM_001025107 **Symbol:** ADAR **Organism:** Homo_sapiens
Description: adenosine deaminase, RNA-specific

Predesigned Result 2 of 9

Accession Nbr: NM_001033049 **Symbol:** ADARB1 **Organism:** Homo_sapiens
Description: adenosine deaminase, RNA-specific, B1 (RED1 homolog rat)

Predesigned Result 3 of 9

Accession Nbr: NM_001111 **Symbol:** ADAR **Organism:** Homo_sapiens
Description: adenosine deaminase, RNA-specific

Predesigned Result 4 of 9

Accession Nbr: NM_001112 **Symbol:** ADARB1 **Organism:** Homo_sapiens
Description: adenosine deaminase, RNA-specific, B1 (RED1 homolog rat)

Predesigned Result 5 of 9

Accession Nbr: NM_015833 **Symbol:** ADARB1 **Organism:** Homo_sapiens
Description: adenosine deaminase, RNA-specific, B1 (RED1 homolog rat)

Predesigned Result 6 of 9

Accession Nbr: NM_015834 **Symbol:** ADARB1 **Organism:** Homo_sapiens
Description: adenosine deaminase, RNA-specific, B1 (RED1 homolog rat)

Predesigned Result 7 of 9

Accession Nbr: NM_015840 **Symbol:** ADAR **Organism:** Homo_sapiens
Description: adenosine deaminase, RNA-specific

Predesigned Result 8 of 9

Accession Nbr: NM_015841 **Symbol:** ADAR **Organism:** Homo_sapiens
Description: adenosine deaminase, RNA-specific

Predesigned Result 9 of 9

Accession Nbr: NM_018702 **Symbol:** ADARB2 **Organism:** Homo_sapiens
Description: adenosine deaminase, RNA-specific, B2 (RED2 homolog rat)

ADD TO ORDER

RESET

Selecting PreDesigned Results for Ordering

Results matching your search criteria appear on the PreDesigned Results page. The PreDesigned Results page opens in expanded view unless you have previously customized the Display Settings. For more information on customizing the Display Settings, refer to the section in this Guide titled "Customizing the Display Settings for PreDesigned Results".

If you need more information on any PreDesigned Result, click the **Accession Number** shown directly under the PreDesigned Result. This will direct you to the **National Center for Biotechnology Information** database (NCBI). You can also access the NCBI database directly by going to their web site at: www.ncbi.nlm.nih.gov.

Note Before clicking Add to Order, be sure you have made **ALL** your ordering selections for **ALL** of the PreDesigned Results that you want. **Clicking Add to Order at any time will automatically take you to the Shopping Cart page to complete your Order. At this point, you will need to complete your Order or choose to save the Order for review at a later time.**

Ordering PreDesigned Results

- To view any PreDesigned Result, click the **Red PreDesigned Result heading**.
Please Note: It may take several seconds to display the result you have selected.
- If your selections returned results for **siRNA-Dicector-Duplexes**, to order the **quantity** you want, under the **PreDesigned Result** you want, in the **siRNA-Dicector-Duplexes** section, enter the **number** of Duplexes you want in the corresponding boxes for the following duplex sizes:
 - 2 nmole Duplexes
 - 10 nmole Duplexes
 - 40 nmole Duplexes
- If your selections returned results for **siRNA-Dicector-TriFECTa Kits**, to order the **TriFECTa Kit(s)**, under the **PreDesigned Result** you want, in the **siRNA-Dicector-TriFECTa Kit** section, place a **check** in the check box next to the **TriFECTa Kit Catalog ID** to order the full kit.
- Continue reviewing all PreDesigned Results and making your selections for **siRNA-Dicector-Duplexes** and **siRNA-Dicector-TriFECTa Kits**.
- When you have made **all** your selections for the PreDesigned Results you want, click the **Add To Order** button located in any PreDesigned Result selection or at the bottom left corner of the PreDesigned Results page.

New Search | **PreDesigned Results** EXPAND ALL COLLAPSE ALL

Display Settings - click here to view Catalog Version: 4

Tip: Click Display Settings above to change the displayed content of this page.

PreDesigned Result 1 of 9

Accession Nbr: NM_001025107 Symbol: ADAR Organism: Homo_sapiens
Description: adenosine deaminase, RNA-specific

siRNA-Dicector-Duplexes
Splice-form Specific designed to target NM_001025107 only

Catalog ID	Location Region/Exon	2 nmole Duplex \$175.00 Qty	10 nmole Duplex \$250.00 Qty	40 nmole Duplex \$395.00 Qty
HSS.RNAI.N001025107.4.1	5'UTR/1	1	2	1
HSS.RNAI.N001025107.4.2	5'UTR/1	0	0	0
HSS.RNAI.N001025107.4.3	CDS/2	0	0	0
HSS.RNAI.N001025107.4.4	3'UTR/15	0	0	0
HSS.RNAI.N001025107.4.5	CDS/14	0	0	0
HSS.RNAI.N001025107.4.6	CDS/7	0	0	0
HSS.RNAI.N001025107.4.7	3'UTR/15	0	0	0
HSS.RNAI.N001025107.4.9	3'UTR/15	0	0	0
HSS.RNAI.N001025107.4.10	CDS/2	0	0	0

siRNA Dicector reagents are predicted to cross react with the following transcripts

Accession Nbr	Gene Symbol	1	2	3	4	5	6	7	9	10
NM_001111	ADAR	-	-	X	X	X	X	X	X	X
NM_015840	ADAR	-	-	X	X	X	X	X	X	X
NM_015841	ADAR	-	-	X	X	X	X	X	X	X
NM_001080425	BEXL1	-	-	X	-	-	-	-	-	-
XM_936467	BEXL1	-	-	X	-	-	-	-	-	-
NM_004758	BZRAP1	-	-	-	X	-	-	-	-	-
NM_019855	CABP5	-	-	X	-	-	-	-	-	-
NM_000569	FCGR3A	-	-	X	-	-	-	-	-	-
NM_000570	FCGR3B	-	-	X	-	-	-	-	-	-
NM_001042784	FLJ25770	-	-	X	-	-	-	-	-	-
NM_178555	FLJ25770	-	-	X	-	-	-	-	-	-
NM_012262	HS2ST1	-	-	X	-	-	-	-	-	X
NM_002938	RNF4	-	-	X	-	-	-	-	-	-

X predicted cross reaction
- predicted not to cross react

ADD TO ORDER

siRNA-Dicector-Duplexes
Splice-form Common designed to target regions common to multiple splice-forms

Catalog ID	Location Region/Exon	2 nmole Duplex \$175.00 Qty	10 nmole Duplex \$250.00 Qty	40 nmole Duplex \$395.00 Qty
HSC.RNAI.N001025107.4.1	3'UTR/15	0	0	0
HSC.RNAI.N001025107.4.2	3'UTR/15	0	0	0
HSC.RNAI.N001025107.4.4	3'UTR/15	0	0	0
HSC.RNAI.N001025107.4.5	CDS/2	0	0	0
HSC.RNAI.N001025107.4.6	CDS/3	0	0	0
HSC.RNAI.N001025107.4.7	5'UTR/2	0	0	0
HSC.RNAI.N001025107.4.8	3'UTR/15	0	0	0
HSC.RNAI.N001025107.4.9	CDS/10	0	0	0
HSC.RNAI.N001025107.4.10	CDS/3	0	0	0

siRNA Dicector reagents are predicted to cross react with the following transcripts

Accession Nbr	Gene Symbol	1	2	4	5	6	7	8	9	10
NM_001025107	ADAR	X	X	X	X	X	X	X	X	X
NM_001111	ADAR	X	X	X	X	X	X	X	X	X
NM_015840	ADAR	X	X	X	X	X	X	X	X	X
NM_015841	ADAR	X	X	X	X	X	X	X	X	X

X predicted cross reaction
- predicted not to cross react

ADD TO ORDER

siRNA-Dicector-TriFECTa Kit
Splice-form Specific designed to target NM_001025107 only

TriFECTa Kit Catalog ID: HSS.RNAI.N001025107.4 Price: \$660.00

TriFECTa reagents are predicted to cross react with the following transcripts

Accession Nbr	Gene Symbol	1	2	3
NM_001111	ADAR	-	-	X
NM_015840	ADAR	-	-	X
NM_015841	ADAR	-	-	X
NM_001080425	BEXL1	-	-	X
XM_936467	BEXL1	-	-	X
NM_019855	CABP5	-	-	X
NM_000569	FCGR3A	-	-	X
NM_000570	FCGR3B	-	-	X
NM_001042784	FLJ25770	-	-	X
NM_178555	FLJ25770	-	-	X
NM_002938	RNF4	-	-	X

X predicted cross reaction
- predicted not to cross react

ADD TO ORDER

siRNA-Dicector-TriFECTa Kit
Splice-form Common designed to target regions common to multiple splice-forms

TriFECTa Kit Catalog ID: HSC.RNAI.N001025107.4 Price: \$660.00

TriFECTa reagents are predicted to cross react with the following transcripts

Accession Nbr	Gene Symbol	1	2	4
NM_001025107	ADAR	X	X	X
NM_001111	ADAR	X	X	X
NM_015840	ADAR	X	X	X
NM_015841	ADAR	X	X	X

X predicted cross reaction
- predicted not to cross react

ADD TO ORDER

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Completing your Order

When you have selected all of the siRNA-Dicector-Duplexes and siRNA-Dicector-TriFECTa Kits you want to order, you are ready to complete your order.

Note If you have not previously logged in, you will be prompted to do so at this time.

- To complete your siRNA-Dicector-Duplex(es) and siRNA-Dicector-TriFECTa RNAi Kit(s) Order, on the **PreDesigned Oligo Sets** page, click **Add To Order** from any location.

The Shopping Cart screen appears showing the order details for the selections you have chosen.

- To complete your Order, on the **Shopping Cart** page, click **Finish Order**.
- To save your Order for a later time, click **Save Order**.
- To order other IDT products before completing your Order, click **Continue Shopping**.
- To review your Order entries, click **View Cart**.

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