

TaqMan® OpenArray® Genotyping

Ordering Guide

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1

How to Order the TaqMan® OpenArray® Genotyping Plates

This chapter covers:

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- Available Formats..... 20

Order the plates

There are two ways to order the TaqMan® OpenArray® Genotyping Plates:

Use the TaqMan® OpenArray® plates product page (this page).

Use the Custom TaqMan® Assay Design Tool ([page 12](#)).

Order using the product page

1. Go to www.appliedbiosystems.com.
2. From the menu bar, select **Products** ▶ **Genotyping**.



3. On the Genotyping page, click **TaqMan® OpenArray® Genotyping Plates**.

The screenshot shows the 'Genotyping' section of a website. It lists various categories of genotyping products. A blue callout box highlights the link 'TaqMan® OpenArray® Genotyping Plates' under the 'SNP Genotyping Assays & Plates' category. A blue arrow labeled 'Click' points to this link.

4. (Optional) On the product page, click the **Product Description** tab for more information about the TaqMan OpenArray Genotyping plates.

5. Click the **Ordering Information** tab, then click **Plate Configurator** under *How to Order* (or click **Configure** next to *TaqMan® OpenArray® Genotyping Plates* in the Product Name list).

The screenshot shows the product page for 'TaqMan® OpenArray® Genotyping Plates'. The 'Ordering Information' tab is selected. A blue callout box labeled 'Click' points to the 'Ordering Information' tab. Another blue callout box labeled 'Click' points to the 'Plate Configurator' link in the 'How to Order' section. A third blue callout box labeled 'Click' points to the 'Configure' button next to the 'TaqMan® OpenArray® Genotyping Plates' product name in the product list table.

<input type="checkbox"/>	Product Name	Part Number	Quantity/Package
<input type="checkbox"/>	TaqMan® OpenArray® Genotyping Plates	TOA	10 plates
<input type="checkbox"/>	TaqMan® OpenArray® Accessories Reorder Kit For 10 plates	4410731	1 kit
<input type="checkbox"/>	TaqMan® OpenArray® Loader Tips	4404571	1 box
<input type="checkbox"/>	TaqMan® OpenArray® Loader Tips 10 Pack	4404604	10 boxes
<input type="checkbox"/>	TaqMan® OpenArray® Master Mix	4404846	1 kit
<input type="checkbox"/>	TaqMan® OpenArray® 384-Well Sample Plates 10 plates	4406947	1 kit

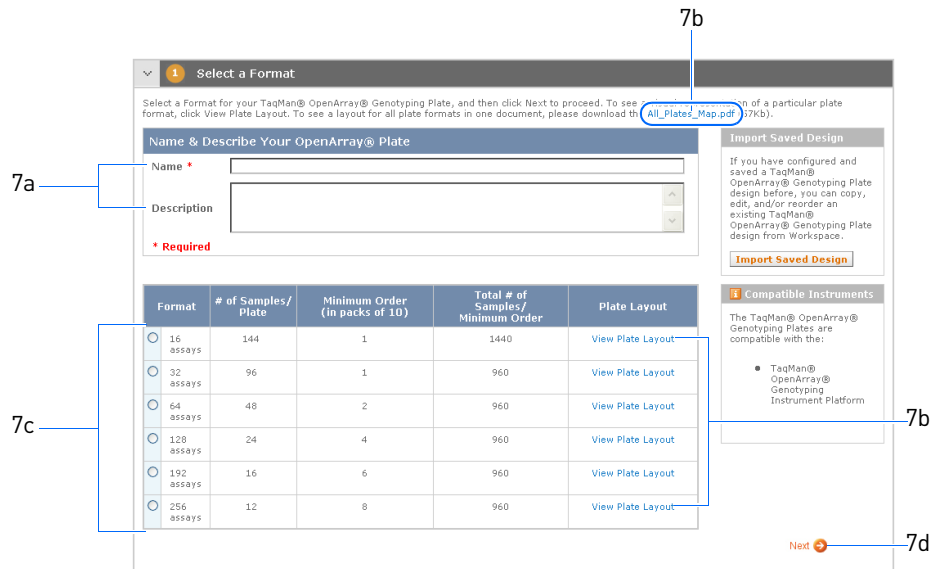
6. If you are not already logged in, the Store Log In page appears. On the Store Log In page, enter your user name and password. If you are not a registered user, click **Register Now**, then follow the prompts.

Note: If you are already logged in, the Store Log In page does not appear. Go to the next step.

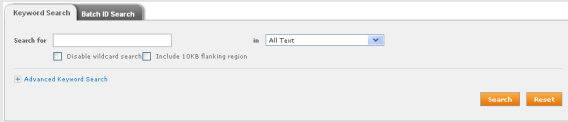
7. In the Configurator, select a format for your genotyping plate:
 - a. Enter a name and description for your plate.


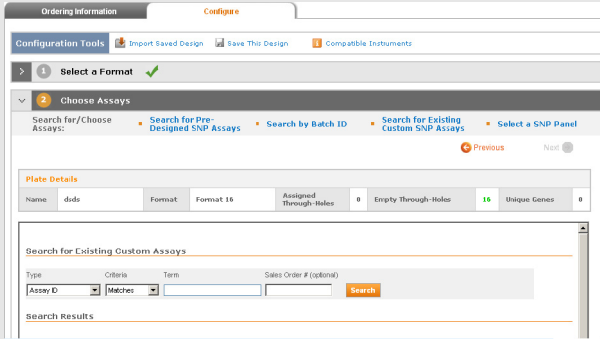
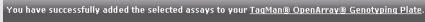

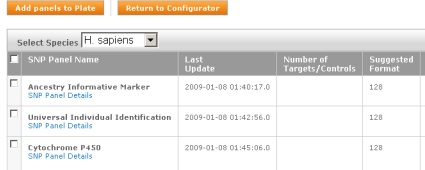
Note: Enter only alphanumeric characters for the plate name and description. You cannot enter more than 24 characters for the plate name.
 - b. (Optional) View the layouts for the plate formats:
 - To see the layout of a specific plate format, click **View Plate Layout** next to the plate of interest.
 - To see a layout of all plate formats in one document, click **All_Plates_Map.pdf**.

Note: For additional information on the formats, see “Available Formats” on page 20.
 - c. Select a format.
 - d. Click **Next**.



8. Choose your assays:
 - a. Search for assays using one of the following options:

Option	To select this option...	When the search results are returned...
Pre-Designed SNP Assays	<ol style="list-style-type: none"> 1. Click Search for Pre-Designed SNP Assays. 2. Enter a keyword, then select a category.  <ol style="list-style-type: none"> 3. (Optional) Select additional search criteria (for example, species or SNP type). 4. Click Search. 	Select your assays, click Add to Plate , then click Return to Configurator .

Option	To select this option...	When the search results are returned...
<p>Batch ID</p>	<ol style="list-style-type: none"> 1. Click Search by Batch ID. 2. Enter or upload a batch of assay IDs.  <ol style="list-style-type: none"> 3. (Optional) Select additional search criteria (for example, species or SNP type). 4. Click Search. 	<p>Select your assays, click Add to Plate, then click Return to Configurator.</p>
<p>Custom SNP Assays</p>	<ol style="list-style-type: none"> 1. Click Search for Existing Custom SNP Assays. 2. Select an option from the Type and Criteria dropdown menus, then enter a keyword in the Term field. 3. (Optional) Enter a Sales Order number. 4. Click Search. 	<p>Select your assays, then click Add to Configurator. In the success message, click TaqMan® OpenArray® Genotyping Plate to return to the Configurator.</p> 
<p>SNP Panel</p>	<p>Click Select a SNP Panel.</p> 	<ol style="list-style-type: none"> 1. To select a complete panel, check the panel of interest. 2. To select individual assays within a panel, click SNP Panel Details, then check the assays of interest. 3. Click Add panels to Plate, then click Return to Configurator 

b. Review the assays added to the genotyping plate. If needed, you can:

- Repeat [step 8a](#) to add more assays.
- Select an assay, then click **Remove** to remove assays.

c. Click Next.

8b

8a

8b

8c

2 Choose Assays

← Previous Next →

Plate Details

Name	Test	Format	Format 128	Assigned Through-Holes	128	Empty Through-Holes	0	Unique Genes	91
------	------	--------	------------	------------------------	-----	---------------------	---	--------------	----

4 ways to search for and choose assays:

- Search for Pre-Designed SNP Assays**
Search by dbSNP rsID, gene symbol, gene name, type of SNP, and more.
- Search by Batch ID**
Search by uploading a file containing multiple IDs, including AB Assay ID, dbSNP ID, rsID, Gene Symbol or RefSeq Accession #.
- Search for Existing Custom SNP Assays**
Search for previously ordered custom designed SNP assays.
- Select a SNP Panel**
Select from expertly pre-defined SNP sets for the study of population genetics, disease or drug response.

Gene Symbol	Assay ID	Assay Name	Legacy Assay ID
<input type="checkbox"/>	PLEKHG5	C_16188366_10	C_16188366_10
<input type="checkbox"/>		C_26052298_10	C_26052298_10
<input type="checkbox"/>		C_778913_10	C_778913_10
<input type="checkbox"/>	AHDC1 FGR	C_2494120_10	C_2494120_10
<input type="checkbox"/>	HIVEP3	C_9030949_10	C_9030949_10
<input type="checkbox"/>	USP24	C_32221116_10	C_32221116_10
<input type="checkbox"/>		C_7770343_10	C_7770343_10
<input type="checkbox"/>	EDG1 LOC100131646	C_27471358_10	C_27471358_10
<input type="checkbox"/>	SENAEC LYSMD1 TNFAIPBL2	C_26139689_10	C_26139689_10
<input type="checkbox"/>	TIPRL	C_2985471_10	C_2985471_10
<input type="checkbox"/>	HMGN1	C_7550746_10	C_7550746_10
<input type="checkbox"/>	ATF3	C_30691095_10	C_30691095_10
<input type="checkbox"/>	PLD5	C_722586_10	C_722586_10
<input type="checkbox"/>		C_8914321_10	C_8914321_10
<input type="checkbox"/>		C_31183706_10	C_31183706_10
<input type="checkbox"/>	ALK	C_27891561_10	C_27891561_10

Remove — 8b

← Previous Next →

9. (Optional) Customize the genotyping plate layout:

- a. To change the location of the assays in the genotyping plate, use the up/down arrows or enter the desired through-hole location.

Note: If you change the through-hole location for one replicate, all other replicates are moved accordingly.

Note: To return to the previously saved layout, click **Reset Layout**.

- b. Click **Update Plate Layout**.

Note: After you click **Update Plate Layout**, the current layout is saved. Clicking **Reset Layout** at this point displays the current layout.

- c. Click **View SubArray #<n>** (where <n> is the subarray number) to view an illustration of the subarray layout.

d. Click Next.

3 Customize Plate Layout (optional)

You can change the location of assays using the up and down arrows in the Move column.

Skip this Step Previous Next

Plate Details

Name	Test	Format	Format 128	Assigned Through-Holes	128	Empty Through-Holes	0	Unique Genes	91
Move	Location	Gene Symbol	Assay ID	Assay Name	Legacy Assay ID				
▼	A1a1	PLEKHG5	C__16188366_10	C__16188366_10					
▲	A1a2		C__26052298_10	C__26052298_10					
▲	A1a3		C__778913_10	C__778913_10					
▲	A1a4	AHDC1 FGR	C__2494120_10	C__2494120_10					
▲	A1a5	HIVEP3	C__9030949_10	C__9030949_10					
▲	A1a6	USP24	C__32221116_10	C__32221116_10					
▲	A1a7		C__7770343_10	C__7770343_10					
▲	A1a8	EDG1 LOC100131646	C__27471358_10	C__27471358_10					

Update Plate Layout Reset Layout

View SubArray #1 (A1)

	1	2	3	4	5	6	7
a	C__16188366_10	C__26052298_10	C__778913_10	C__2494120_10	C__9030949_10	C__32221116_10	C__7770343_10
b	C__26139689_10	C__2985471_10	C__7550746_10	C__30091095_10	C__722586_10	C__8914321_10	C__31183706_10
c	C__27978607_10	C__32187474_20	C__790944_10	C__30021395_20	C__15900715_10	C__441412_10	C__9471400_10
d	C__30049893_10	C__29071253_10	C__1508579_10	C__1478361_10	C__788020_10	C__443622_10	C__1519732_10
e	C__1386349_10	C__7511789_10	C__1121830_10	C__29422763_10	C__27311985_10	C__2949512_10	C__3052139_10
f	C__293090_10	C__3164411_10	C__31662485_10	C__7523762_10	C__29040411_10	C__8767011_10	C__16252570_10
g	C__16226232_10	C__996147_10	C__493379_10	C__27403312_10	C__1903207_10	C__14517_10	C__2270718_10
h	C__11448835_10	C__26717658_10	C__2637064_10	C__2130393_10	C__328256_10	C__2662380_10	C__30263561_10

View SubArray #2 (B1)

Skip this Step Previous Next

10. (Optional) Use one or more of the configuration tools:

Ordering Information Configure

Configuration Tools Save This Design Export Assay List Print Plate Layout Compatible Instruments

1 Select a Format ✓

2 Choose Assays ✓

3 Customize Plate Layout (optional) ✓

4 Review & Order

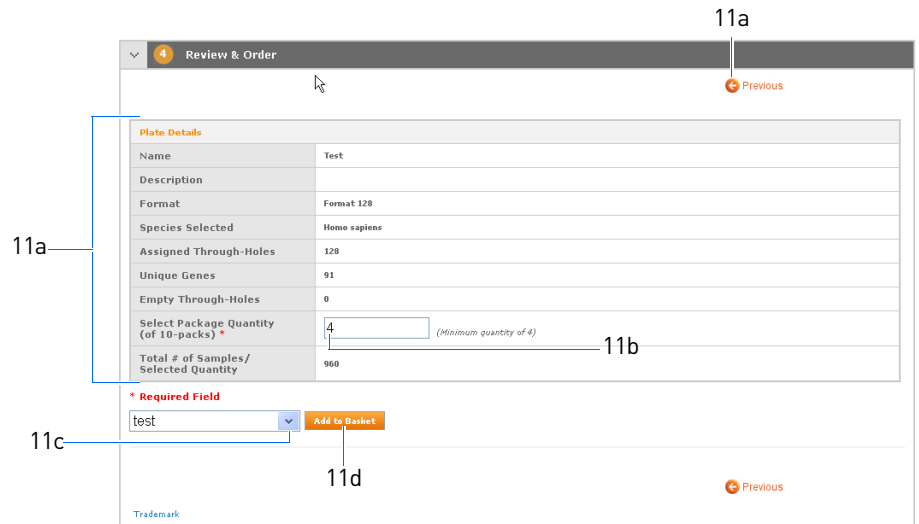
- Click **Save This Design** to save your current genotyping plate design to the Applied Biosystems store workspace. If your design is successfully saved, the following message appears at the top of the page:

You have successfully added your design to workspace.

Note: For more information on the Applied Biosystems store workspace, click the **workspace** link shown in the message.

- Click **Export Assay List**, then follow the prompts to export a list of your current assays to a simple text application (*.txt file).
- Click **Print Plate Layout**, then select **File ▶ Print** to print your current genotyping plate layout.

11. Review and order your genotyping plate:
 - a. Review the plate details. If needed, click **Previous** to change the information.
 - b. Enter the quantity of plates to order. The minimum quantity you can order is 1 package; each package contains 10 TaqMan OpenArray Genotyping Plates.
Note: After the minimum quantity has been fulfilled, you can order genotyping plates in increments of 1 plate.
 - c. Select your basket from the dropdown menu.



- d. Click **Add to Basket**. You can:
 - Repeat [step 7 on page 7](#) through [step 11 on page 11](#) to continue ordering TaqMan OpenArray Genotyping Plates.
 - Click **Shopping Basket** to check out.



Applied Biosystems ships the genotyping plates frozen, with dry ice. Upon receipt, store the frozen, unopened plates at -20 °C. You can store frozen, unopened plates until the expiration date provided on the product label. For further storage information (for example, how to store thawed plates), refer to the *TaqMan® OpenArray® Genotyping Getting Started Guide* (PN 4377476).

Order using the Design Tool

1. Go to the Custom TaqMan® Assay Design Tool web site:
www5.appliedbiosystems.com/tools/cadt/
2. On the Custom TaqMan® Assay Design Tool home page, click **Order Custom Genotyping Assays**.

Custom TaqMan® Assay Design Tool

Home

Order Custom Assays

TaqMan® SNP Genotyping Assays

Order a custom TaqMan® SNP Genotyping Assay by first entering a sequence, then submitting the chosen target sites for assay design. Upon notification of successful assay design, simply add the desired custom assays to your shopping basket.

[Order Custom Genotyping Assays >](#) Click

Other Ways to Order:

- Enter Custom Primer/Probe Pairs >
- Search for Pre-designed TaqMan® SNP Genotyping Assays >

TaqMan® Gene Expression Assays

Order a custom TaqMan® Gene Expression Assay by first entering a sequence, then submitting the chosen target regions for assay design. Upon notification of successful assay design, simply add the desired custom assays to your shopping basket.

[Order Custom Gene Expression Assays >](#)

Other Ways to Order:

- Enter Custom Primer/Probe Pairs >
- Search for Pre-designed TaqMan® Gene Expression Assays >

Reorder Custom Assays

Reorder a custom designed assay by first searching for it in our system. You may search by such fields as Assay Name, Assay ID, submission date, etc. Once found, simply add the desired custom assay to your shopping basket.

- Reorder Existing Custom Assays >
- View All Submitted Custom Design Jobs >

3. Enter the required sequence information, then click **Submit For Assay Design**.
Note: For detailed information on how to enter the required sequence information, refer to the *Custom TaqMan® Assays Design and Ordering*.
4. If you are not already logged in, the Store Log In page appears. On the Store Log In page, enter your user name and password. If you are not a registered user, click **Register Now**, then follow the prompts.
Note: If you are already logged in, the Store Log In page does not appear. Go to the next step.
5. On the Select Assays page, view the Design Status for your assay(s). If the Design Status is:
 - **Pending**, the assay(s) is being processed. Wait 1 to 2 minutes, then click **Refresh Batch List**.

Home > Enter Sequences > **Select Assays** > Review & Order

Design Job Details

Your design job has been submitted as batch **w0906117706000**. Batch details are below.
If batch w0906117706000 is NOT shown below, please click the "Refresh Batch List" link.

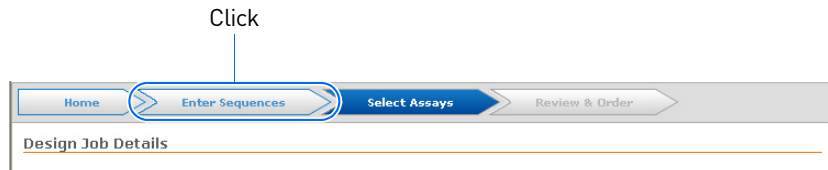
[Refresh Batch List](#)

Batch ID	Submitted	Status	Details ?
w0906117706000	2009-06-01 15:02:34	PENDING	

[+] View All Batches

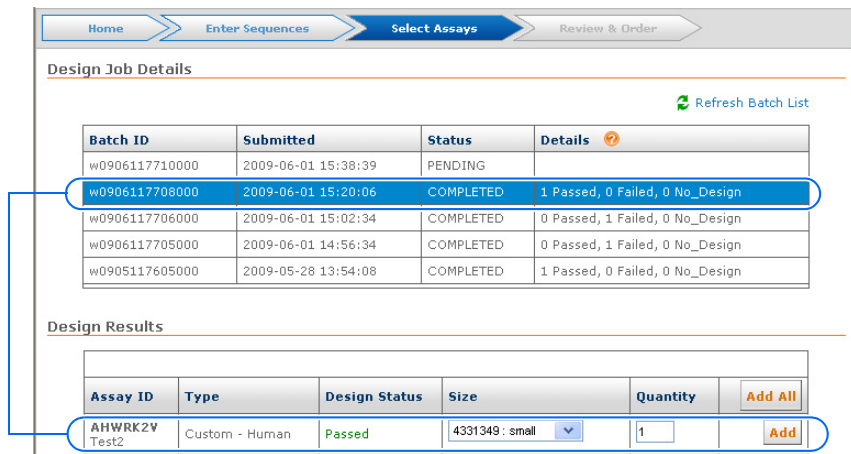
If the status is Pending,
click **Refresh Batch List**.

- **Passed**, the assay(s) passed. Go to the next step.
- **Failed**, the assay(s) failed. Click **Enter Sequences** and try entering different sequence information (see [step 3](#) above).

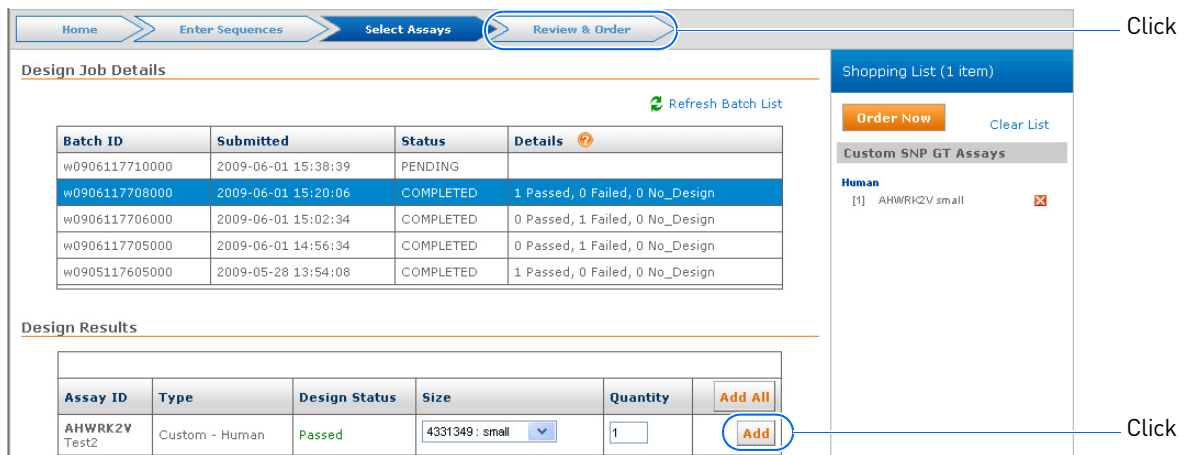


Note: After processing the assays, Applied Biosystems will also email you a Design Report.

6. In the Design Job Details table, select the assay to view in the Design Results table.



7. Click **Add** next to the assay to order, then click **Review & Order** (or click **Order Now**).



8. On the Review & Order page, click **Plate View**, then click **Add To Configurator**.

Note: If there are gene expression assays in the Shopping List, the gene expression assays are grayed out. You cannot add gene expression assays to a genotyping plate. You can order the gene expression assays in single tubes by selecting **Singles View**.

Home Select Assays Review & Order

Please review your Shopping List below and make any desired modifications, then click "Add to Basket" to begin the purchasing process.

If not already logged in, you will be prompted to log in to the Applied Biosystems Store before adding products to basket. If you do not have a Store account, registration is quick and easy. [Register with AB Store](#)

Other Ordering Options: [Email to AB or any e-mail address.](#) [Print for fax/mail order or hardcopy record.](#)

I wish to order assays in single tubes: **Singles View** I wish to order assays in plates: **Plate View** ✓

Shopping List (2 items)

- Human and Non-human assays cannot be plated on the same plate.
- You may append assays to previously created plate configurations.

Plateable Assays - Custom TaqMan® SNP Genotyping Assays			Select All
Assay ID	Assay Name	Size	Selected
AH0I14V	CH129870	4332075: Non-Human: Medium: 5000 reactions: 40X	<input type="checkbox"/>
AH1RHA2	CH101554	4332075: Non-Human: Medium: 5000 reactions: 40X	<input type="checkbox"/>

Add To Configurator

9. Select a new or existing plate configuration:

- To add the assays to a new TaqMan OpenArray Genotyping Plate, select **Add to New Configuration**, enter a name for the plate, then click **Send To Configurator**.
- To add the assays to an existing TaqMan OpenArray Genotyping Plate, select **Add to Existing Configuration**, browse to the plate of interest, then click **Send To Configurator**.

Send Selected Assays to Plate Configurator

The selected genotyping assays will be sent to the TaqMan® OpenArray® Genotyping Plate Configurator. You will then be able to return to the previous page and proceed with ordering of any non-plate-able assays and/or proceed to the configurator (in a new browser window), finalize the layout of the plate(s), and place your order for plated assays.

Add to Existing Configuration:

Add to New Configuration:

Send To Configurator **Cancel**

10. Click **Proceed To Configurator**.

Send Selected Assays to Plate Configurator

Your assays have been successfully sent to configuration(s): **MyNewOAConfig**.

You may now proceed to the configurator (in a new browser window) to order your plated assays and/or close this box and return to the Review & Order page to order any non-platable assays you may have added to your Shopping List.

Proceed To Configurator **Return to Shopping List**

11. The Design Tool opens step 2 of the Configurator (Choose Assays) in a new window. Confirm that the correct configuration name is displayed under Plate Details, and that the assays you added are included in the plate.

Taqman® OpenArray® Configurator

Ordering Information **Configure**

Configuration Tools Save This Design Compatible Instruments

1 Select a Format ✓

2 Choose Assays

← Previous Next →

Plate Details

Name	MyNewOAConfig	Format	Format 16	Assigned Through-Holes	2	Empty Through-Holes	14	Unique Genes	0
------	---------------	--------	-----------	------------------------	---	---------------------	----	--------------	---

4 ways to search for and choose assays:

- Search for Pre-Designed SNP Assays

Search by dbSNP rsID, gene symbol, gene name, type of SNP, and more.

<input type="checkbox"/>	Gene Symbol	Assay ID	Assay Name	Legacy Assay ID
<input type="checkbox"/>		AH0114V	CH129870	
<input type="checkbox"/>		AH1RHA2	CH101554	

Confirm that the correct name is displayed

Confirm that the correct assays are included

12. (If needed) The Design Tool automatically selects the plate format based on the number of assays you added to the plate. To change the format, click **Previous** to go to step 1 of the Configurator (Select a Format), then select a format according to [step 7 on page 7](#).
13. Complete the Configurator according to [step 8 on page 7](#) through [step 11 on page 11](#).

Reorder the plates

There are two ways to reorder the same TaqMan® OpenArray® Genotyping Plates:

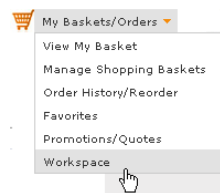
- Reorder by importing a saved design into the Configurator (this page)
- Reorder by duplicating a previously shipped order (one-click reorder) (page 18)

Reorder by importing a saved design

To reorder by importing a saved design, you must have previously saved a design (step 10 on page 10) or added an order to your shopping basket (step 11 on page 11). Use this method if you want to change the plate design before reordering.

Note: You can use this method whether or not you have submitted the order (that is, you added the order to your shopping basket, but did not check out).

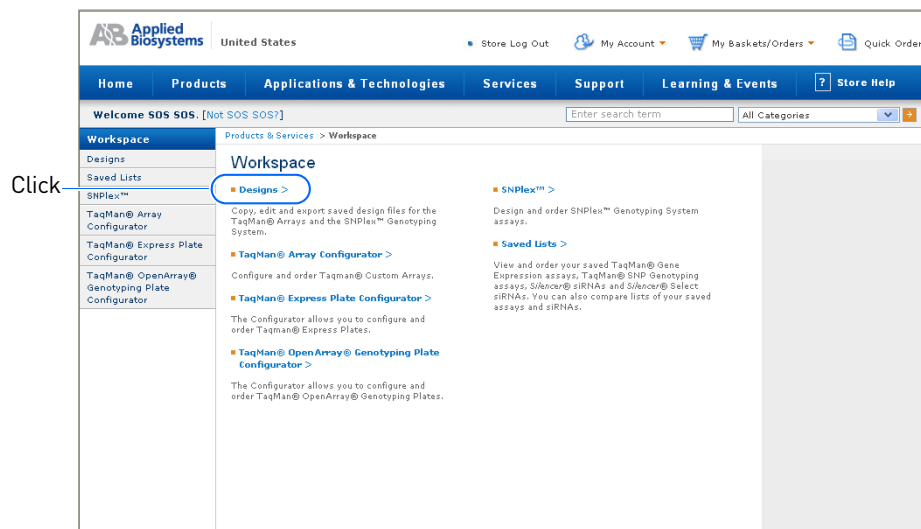
1. Go to www.appliedbiosystems.com.
2. At the top of the Home page, select **My Baskets/Orders** ▶ **Workspace**.



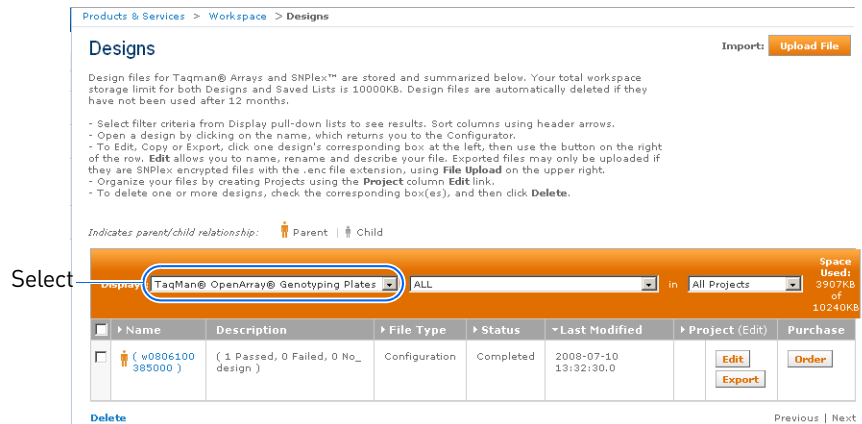
3. If you are not already logged in, the Store Log In page appears. On the Store Log In page, enter your user name and password. If you are not a registered user, click **Register Now**, then follow the prompts.

Note: If you are already logged in, the Store Log In page does not appear. Go to the next step.

4. On the Workspace page, click **Designs**.



5. On the Designs page, filter the search criteria:
 - a. From the first Display dropdown menu, select **TaqMan® OpenArray® Genotyping Plates**.



- b. (Optional) Select the desired options from the remaining Display dropdown menus.

6. Select the design to reorder:

- Click the design name.
- Or
- Click **Order** next to the design.



You are returned to step 4 of the Configurator (Review & Order).

7. Review and order the genotyping plate according to [step 11 on page 11](#), or click **Previous** to make changes.

Plate Details	
Name	Test
Description	
Format	Format 128
Species Selected	Homo sapiens
Assigned Through-Holes	128
Unique Genes	91
Empty Through-Holes	0
Select Package Quantity (of 10-packs) *	4 <small>(Minimum quantity of 4)</small>
Total # of Samples / Selected Quantity	960

* Required Field

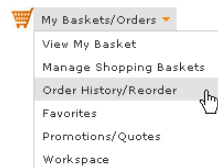
test

Previous

Reorder by duplicating a previously shipped order (one-click reorder)

To use this method, you must have previously submitted an order ([step 11 on page 11](#)), and shipping must be complete on that order. Use this method if you want to order the exact plate design from a previous order.

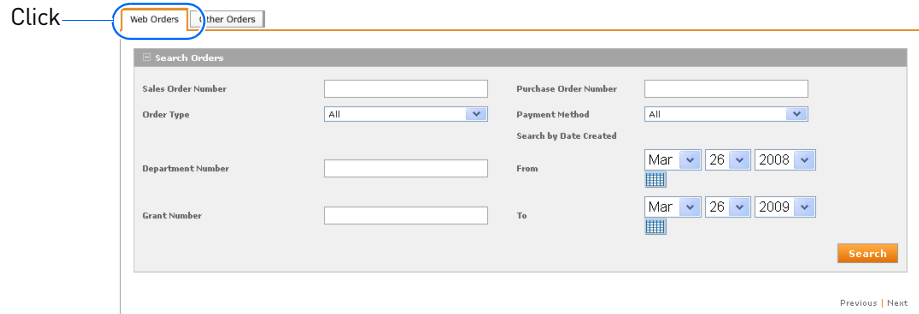
1. Go to www.appliedbiosystems.com.
2. At the top of the Home page, select **My Baskets/Orders ▶ Order History/Reorder**.



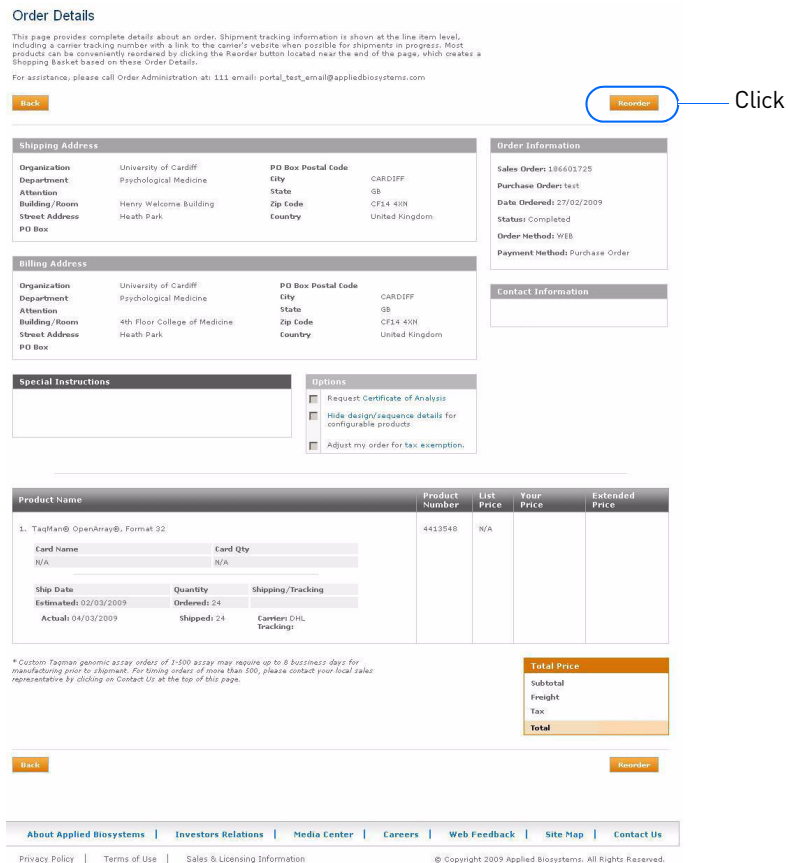
3. If you are not already logged in, the Store Log In page appears. On the Store Log In page, enter your user name and password.

Note: If you are already logged in, the Store Log In page does not appear. Go to the next step.

- On the Order Inquiry page, click the **Web Orders** tab, enter the requested information in one or more fields, then click **Search**.



- When the search results are displayed, select the genotyping plate to reorder.
- On the Order Details page, review the order, then click **Reorder** to open your shopping basket.



- From your shopping basket, check out as usual.

Available Formats

There are six TaqMan OpenArray Genotyping Plate formats available. As shown in the table below:

- The total number of samples that you can load into a genotyping plate depends on the plate format.
- A single genotyping plate can accept one to three loads from one to three OpenArray® 384-Well Sample Plates, depending on how many samples per subarray are required.

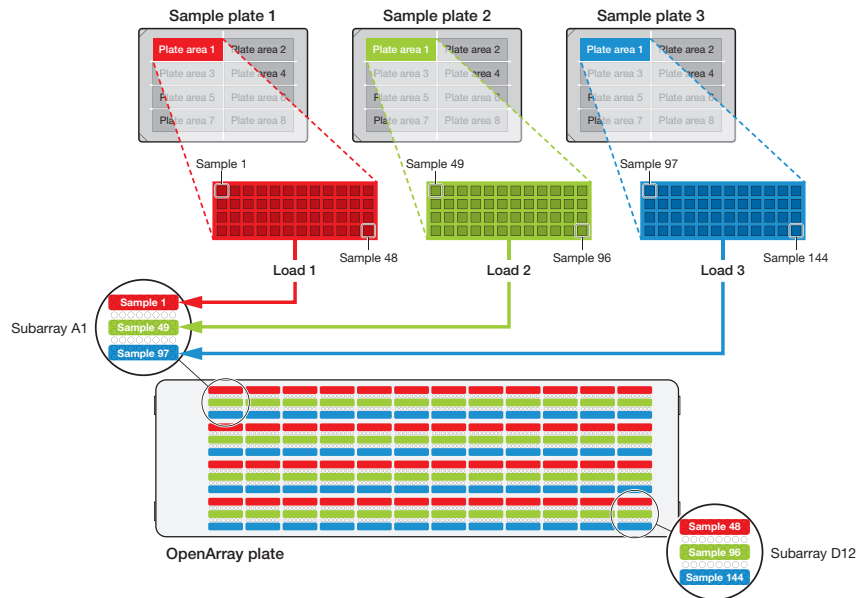
TaqMan® OpenArray® Genotyping Plates					
Format	Part number	Maximum no. of samples per plate	Required no. of samples per subarray	Required no. of loads	See page
16	4413546	144	3	3	21
32	4413548	96	2	2	22
64	4413550	48	1	1	23
128	4413551	24	1	1	23
192	4413553	16	1	1	24
256	4413554	12	1	1	24

Format 16

Format 16 of the genotyping plate is preloaded with 16 assays. You can load up to 144 samples into Format 16. Applied Biosystems recommends the following arrangement:

- For sample plate 1, load samples 1 to 48 in one area of the sample plate.
- For sample plate 2, load samples 49 to 96 in one area of the sample plate.
- For sample plate 3, load samples 97 to 144 in one area of the sample plate.

For example:

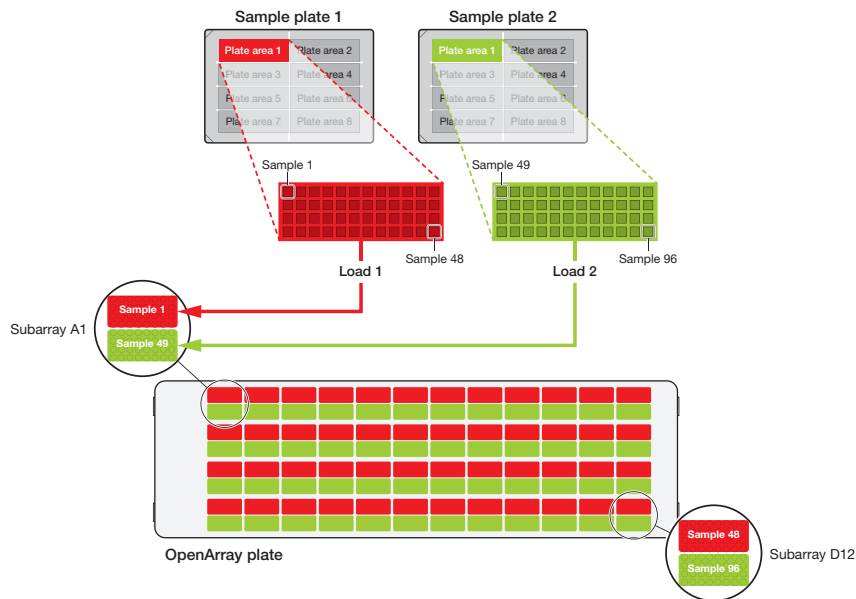


Format 32

Format 32 of the genotyping plate is preloaded with 32 assays. You can load up to 96 samples into Format 32. Applied Biosystems recommends the following arrangement:

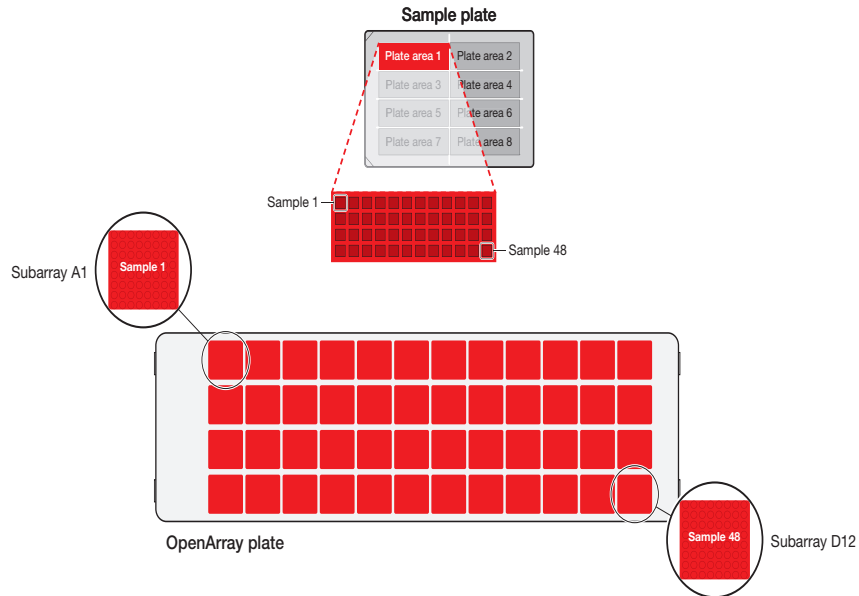
- For sample plate 1, load samples 1 to 48 in one area of the sample plate.
- For sample plate 2, load samples 49 to 96 in one area of the sample plate.

For example:



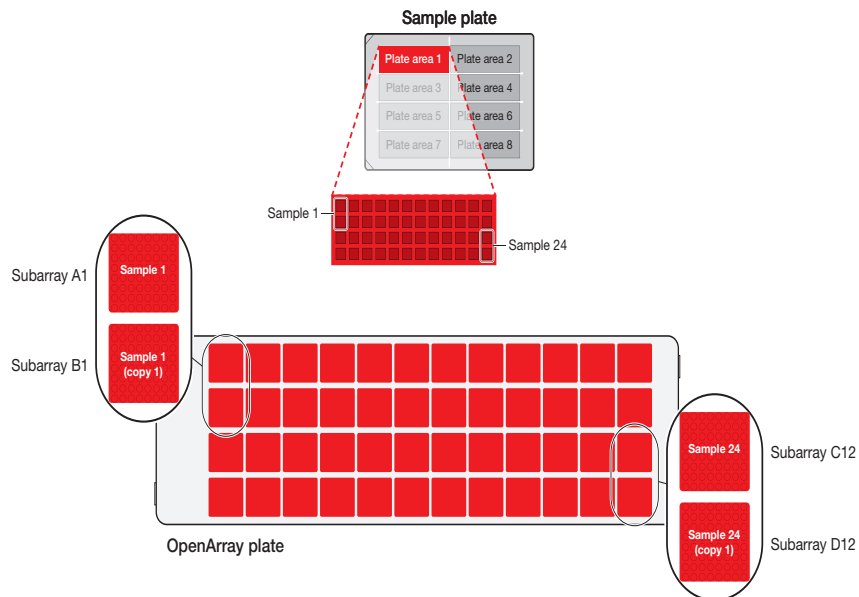
Format 64

Format 64 of the genotyping plate is preloaded with 64 assays. You can load up to 48 samples into Format 64. Applied Biosystems recommends that you load samples 1 to 48 in one area of the sample plate. For example:



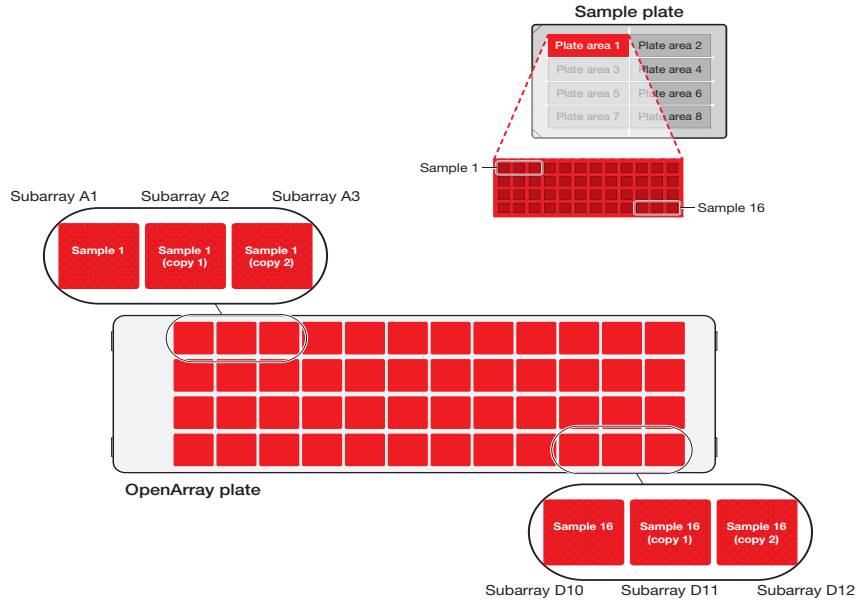
Format 128

Format 128 of the genotyping plate is preloaded with 128 assays. You can load up to 24 samples into Format 128. Applied Biosystems recommends that you load samples 1 to 24 in one area of the sample plate, in duplicate. For example:



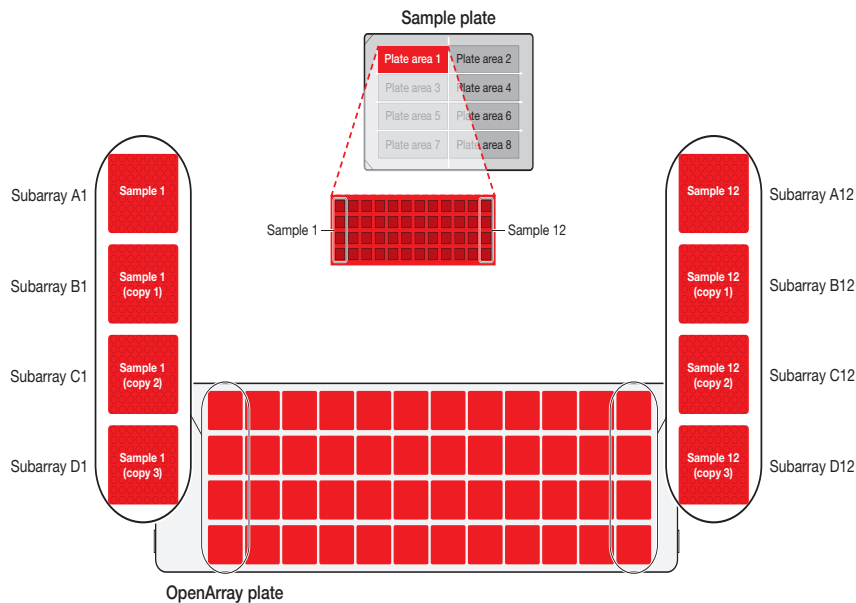
Format 192

Format 192 of the TaqMan OpenArray Genotyping Plate is preloaded with 192 assays. You can load up to 16 samples into Format 192. Applied Biosystems recommends that you load samples 1 to 16 in one area of the sample plate, in triplicate. For example:



Format 256

Format 256 of the TaqMan OpenArray Genotyping Plate is preloaded with 256 assays. You can load up to 12 samples into Format 256. Applied Biosystems recommends that you load samples 1 to 12 in one area of the sample plate, in quadruplicate. For example:



2

Array Information CD

This chapter covers:

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■ Plate setup file (*.spf)	26
■ Assay Information File (AIF)	27

About the Information CD

When you order one or more TaqMan[®] OpenArray[®] Genotyping Plates, a CD is shipped with your order. The CD includes the following files:

- One plate setup file (*.spf) for each genotyping plate in your order ([page 26](#))
- Assay Information File (AIF) ([page 27](#))

Plate setup file (*.spf)

Each plate setup file (*.spf) contains information for its corresponding TaqMan OpenArray Genotyping Plate, such as:

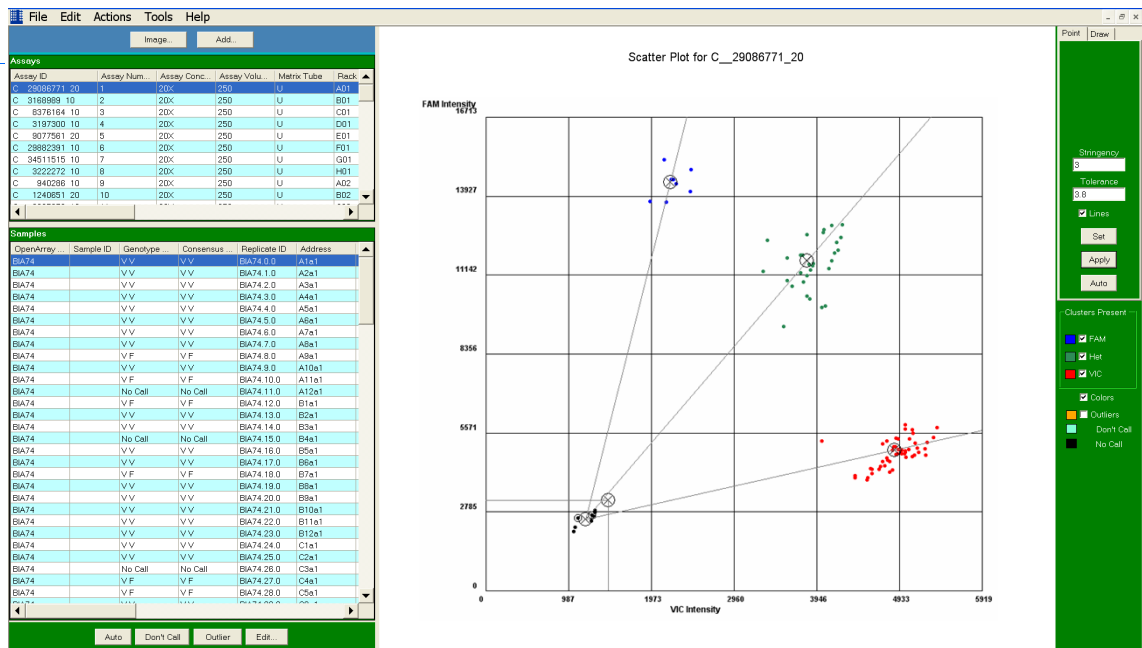
- Assay ID
- Reporter 1 and 2 sequences
- Gene symbol and name
- Location of each assay in the genotyping plate

Each plate setup file is named with the serial number of its corresponding genotyping plate. For example, the plate setup file for a genotyping plate with the serial number **ABC01** is named **ABC01.spf**.

Before the OpenArray® instrument can image a TaqMan OpenArray Genotyping Plate, the OpenArray® SNP Genotyping Analysis Software must access the plate's corresponding *.spf file. For detailed procedures on using *.spf files with the OpenArray software, see the *TaqMan® OpenArray® Genotyping Getting Started Guide*.

IMPORTANT! Modifying the contents of the plate setup file can corrupt the file, making the file unusable (that is, you will not be able to access information for the genotyping plate).

During imaging, the OpenArray software uses the *.spf file to populate the columns in the Assays pane.



Assay Information File (AIF)

About the AIF

The Assay Information File (AIF) is a text file that describes the assays in the TaqMan OpenArray Genotyping Plate:

TQMN_OPNARRY_SalesOrder_ProdOrder.txt

where *SalesOrder* is your sales order number, and *ProdOrder* is an internal (for Applied Biosystems use) production order number

To view the AIF as a spreadsheet in Microsoft® Excel® Software:

1. Load the Array Information CD into the CD drive.
2. Browse to and open the drive that contains the Array Information CD.
3. Right-click **TQMN_OPNARRY_SalesOrder_ProdOrder.txt**, select **Open with**, then select the Excel software.

AIF columns

The table below describes the columns of the AIF.

Several of the AIF columns apply to Applied Biosystems assays that are shipped in tubes; any information that appears in these columns is not applicable to the TaqMan OpenArray Genotyping Plates. *These columns are included to preserve the AIF format; if you already have macros or a database that you use for Applied Biosystems AIFs, you do not have to change the macros or database.* In the table below, the columns that do not apply to the genotyping plates are grayed out.

Column name	Description of content	Example
Study Name	The name of your study (user-defined)	MyStudy_062009
(Sales) Order Number	A unique number that identifies the Applied Biosystems sales order	1234567
Ship Date	The date when the assay was packaged for shipment	Any information that appears in these columns is not applicable to the TaqMan OpenArray Genotyping Plates.
Delivery Number (Shipment ID)	A unique barcode number that identifies the shipment Note: The shipment ID also appears in the plate ID.	
Part Number	A number that identifies the product line	
Product Type	The Applied Biosystems product line associated with the assay	TaqMan® SNP Genotyping Assays
Assay ID	An alphanumeric string that identifies the assay	<ul style="list-style-type: none"> • C_22013460_10 • RS8140252-CT
Lot Number	A unique number that identifies the manufacturing batch to which the assay belongs	868498

Column name	Description of content	Example
Shipping Rack or Plate Type	The type of container in which the assay is shipped (such as a 96-position or a 16-position tube rack)	Any information that appears in these columns is not applicable to the TaqMan OpenArray Genotyping Plates.
Shipping Rack or Plate ID	A barcode number on the label of each shipped rack or plate that consists of the shipment ID plus a unique numeric suffix that identifies the rack or plate containing the assay.	
Vial/Tube Type	The type of vial or tube that contains the assay	
Vial/Tube ID	A unique barcode number on the bottom of each assay vial or tube that identifies it	
Well Location on the Shipping Rack or Plate	The location of the assay on the associated shipping rack or plate	
Assay Mix Concentration	The concentration of the assay, including both primers and probe	
Forward Primer Name	The name of the forward primer, assigned by the design software, that consists of the assay ID plus an "F" suffix	RS8140252-CTF
Forward Primer Sequence	The nucleotide sequence of the forward primer	GATTGCGCCACTTCACT...
Forward Primer Concentration	The concentration of the forward primer (μM)	36
Reverse Primer Name	The name of the reverse primer, assigned by the design software, that consists of the assay ID plus an "R" suffix	RS8140252-CTR
Reverse Primer Sequence	The nucleotide sequence of the reverse primer	CGCCACTGATTGTCACT...
Reverse Primer Concentration	The concentration of the reverse primer (μM)	36
Reporter 1 Name	The name of the reporter 1 oligonucleotide probe, assigned by the design software, that consists of the assay ID and a suffix code (V1 or V2). The letter in the suffix code identifies the reporter dye that is covalently bound to the fluorogenic probe. The number identifies the DNA strand used to design the probe: <ul style="list-style-type: none"> • 1 – Forward strand design • 2 – Reverse strand design For example, in the name "RS8140252-CTV1," the letter "V" indicates that the probe is labeled with the VIC [®] dye, and the number "1" indicates that the probe was designed to the forward strand.	RS8140252-CTV1
Reporter 1 Dye	The reporter dye label for the reporter 1 probe	VIC [®] dye
Reporter 1 Sequence	The nucleotide sequence of the reporter 1 probe	ACTTCAGATTGCGCCCT...
Reporter 1 Concentration	The concentration of the reporter 1 probe (μM)	8
Reporter 1 Quencher	The quencher used for reporter 1 probe (for example, Minor Groove Binder-Non Fluorescing Quencher [MGB-NFQ])	NFQ

Column name	Description of content	Example
Reporter 2 Name	The name of the reporter 2 oligonucleotide probe, assigned by the design software, that consists of the assay ID and a suffix code (M1 or M2). The letter in the suffix code identifies the reporter dye that is covalently bound to the fluorogenic probe. The number identifies the DNA strand used to design the probe: <ul style="list-style-type: none"> • 1 – Forward strand design • 2 – Reverse strand design For example, in the name “RS8140252-CTM1,” the letter “M” indicates that the probe is labeled with the FAM™ dye, and the number “1” indicates that the probe was designed to the forward strand.	RS8140252-CTM1
Reporter 2 Dye	The reporter dye label for the reporter 2 probe	FAM™ dye
Reporter 2 Sequence	The nucleotide sequence of the reporter 2 probe	TTGCGCAGCTGCGCCCT...
Reporter 2 Concentration	The concentration of the reporter 2 probe (μM)	8
Reporter 2 Quencher	The quencher used for reporter 2 probe (for example, Minor Groove Binder-Non Fluorescing Quencher [MGB-NFQ])	NFQ
Context Sequence	The nucleotide sequence surrounding the SNP site; the SNP alleles are in brackets The order of the alleles corresponds to the association with the reporter dyes, where [Allele 1 = VIC/Allele 2 = FAM]	AGGAAACGT[C/T]GGGC...
Design Strand	Indicates the strand used to design the probe: <ul style="list-style-type: none"> • Forward – The probe binds to the same strand as the forward primer. • Reverse – The probe binds to the same strand as the reverse primer. 	Forward
Category	The Celera Panther Protein Classification (Level 1) for the gene	Chromosome 9
Category ID	A unique alphanumeric abbreviation of the Panther category classification for the assay	Chr9
Group	The Celera Panther Protein Classification (Level 2) for the gene	D9S1677-D9S289
Group ID	A unique, alphanumeric abbreviation of the Panther group classification for the assay	D9S1677
Gene Symbol	The LocusLink symbol for the associated gene	TXN
Gene Name	The LocusLink gene name	thioredoxin
Chromosome	The chromosome containing the gene	9
Species	The organism for which the assay was designed	Homo sapiens
Target Exons	The exon or exons (as referenced by the public accession number) that are spanned by the probe	2
NCBI Gene Reference	The NCBI transcript identification number that corresponds to the gene	NM_003329.2
NCBI SNP Reference	The reference ID number from the NCBI-dbSNP database	rs4135182

Column name	Description of content	Example
Medline Reference	PubMed references for the gene	2274082
Celera ID	The unique Celera Discovery System (CDS) assay identification number for the gene	hCV2013460
Cytogenetic Band	The chromosomal band where the gene is located; if unavailable, then the chromosome number is provided	9q31.3a
SNP Type	The type of SNP, based on Celera Assembly: Acceptor Splice Site, Donor Splice Site, Intergenic/Unknown, Intron, Mis-sense Mutation, Nonsense Mutation, Putative UTR 5' , Silent Mutation, UTR 3' , UTR 5'	INTRON
Minor Allele Frequency - Caucasian	Minor Allele Frequency (MAF) for the referenced population	0.24
Minor Allele Frequency -African-American		
Minor Allele Frequency -Japanese		
Minor Allele Frequency -Chinese		
Celera Assembly Build Number	The version of the Celera Assembly from which the coordinate position is obtained	R27
Location on Celera Assembly	The nucleotide location on the Celera Human Genome Assembly (as referenced)	42982742
NCBI Assembly Build Number	The version of the NCBI Assembly from which the coordinate position is obtained	36
Location on NCBI Assembly	The nucleotide location on the NCBI Human Genome Assembly (as referenced)	112055641

Documentation and Support

System documentation

The following documents are available for the OpenArray® system:

Document	Description	Part number
<i>OpenArray® System Site Preparation Guide</i>	Provides information on preparing the customer site for the OpenArray® system.	4401171
<i>TaqMan® OpenArray® Genotyping Troubleshooting Guide</i>	Provides troubleshooting information for TaqMan® OpenArray® Genotyping. To be used in conjunction with the <i>TaqMan® OpenArray® Genotyping Getting Started Guide</i> .	4401671
<i>TaqMan® OpenArray® Genotyping Getting Started Guide</i>	Provides procedures for performing TaqMan® OpenArray® Genotyping.	4377476
<i>TaqMan® OpenArray® Genotyping Quick Reference Card</i>	Describes the overall workflow and provides brief procedures for performing TaqMan® OpenArray® Genotyping.	4400402

Related documentation

When using this , you may find the documents listed below useful. To obtain this and additional documentation, see [“Obtaining support” on page 32](#).

Document	Part number
<i>Application Note: DNA Genotyping from Human FFPE Samples – Reliable and Reproducible</i>	137AP04-01
<i>Bioinformatic Evaluation of a Sequence for Custom TaqMan® SNP Genotyping Assays</i>	4371003
<i>Ordering TaqMan® SNP Genotyping Assays Quick Reference Card</i>	4374204
<i>TaqMan® SNP Genotyping Assays Protocol</i>	4332856
<i>User Bulletin: Human DNA Sample Quantification Protocol Using the RNase P Kit</i>	4342582

Obtaining support

For the latest services and support information for all locations, go to:

www.appliedbiosystems.com

At the Applied Biosystems web site, you can:

- Access worldwide telephone and fax numbers to contact Applied Biosystems Technical Support and Sales facilities.
- Search through frequently asked questions (FAQs).
- Submit a question directly to Technical Support.
- Order Applied Biosystems user documents, SDSs, certificates of analysis, and other related documents.
- Download PDF documents.
- Obtain information about customer training.
- Download software updates and patches.

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Technical Resources and Support

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for all locations, please refer to our Web site at
www.appliedbiosystems.com/support