Applied Biosystems

Online Ordering Guide for TaqMan® Gene Expression Assays

CONTENTS

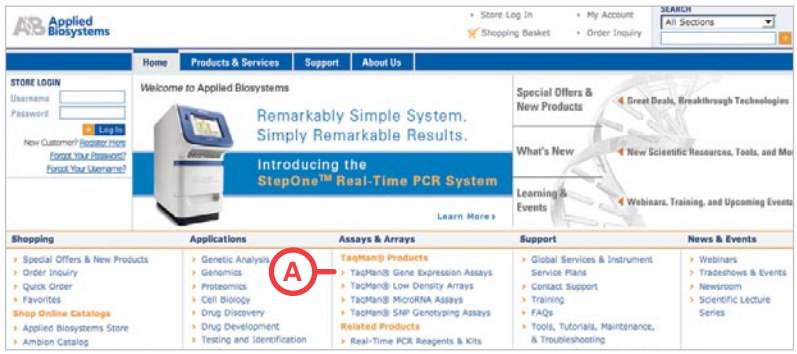
Note: Custom TaqMan® Assays are not covered in this guide.

Assay Product Information

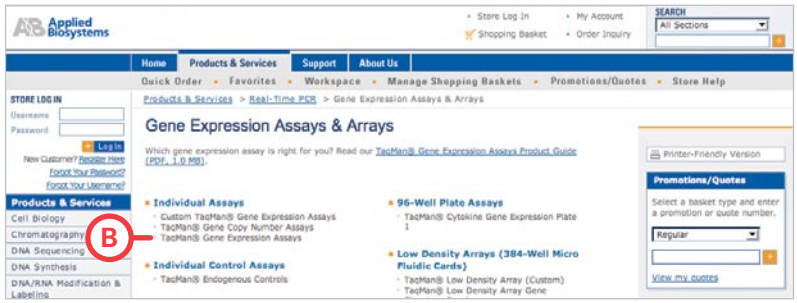
Assay Type	Inventory Status	Number of 20µL Reactions (20X Concentration)	Dye Type	Approximate Delivery Time	Part Number
Inventoried	In stock	250	FAM™ dye-labeled TaqMan® MGB probe	3–6 business days	4331182
Made-to-Order	Manufactured when ordered	360	FAM dye-labeled TaqMan MGB probe	5–12 business days	4351372

STEP 1: GO TO TAQMAN GENE EXPRESSION ASSAYS FROM APPLIED BIOSYSTEMS HOME PAGE (WWW.APPLIEDBIOSYSTEMS.COM)

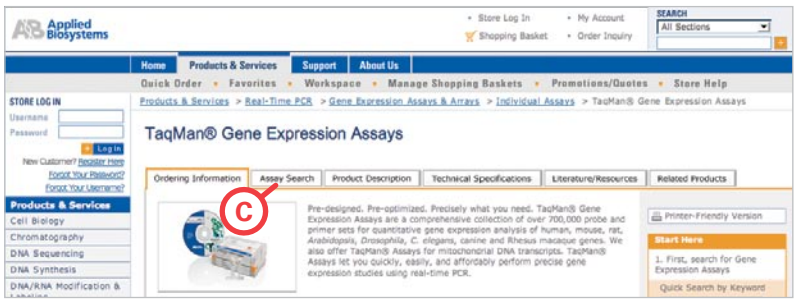
A. Click "TaqMan® Gene Expression Assays" under the "Assays & Arrays" section.



B. Click "TaqMan® Gene Expression Assays" under the "Individual Assays" section.



C. Click the "Assay Search" tab to find the assay of interest.



STEP 2: SEARCHING FOR ASSAYS

Find assays by using either keyword or batch ID searches.

A. Select "Keyword Search" or "Batch ID Search."

B. Keyword Search

B1. **Select** an identification category from the drop-down menu *(for example, "Gene Symbol" or "RefSeq ID." You may also leave it as "All Text").*

B2. **Type** a keyword in the "Search for" field. Use "*" for wildcard searches (e.g., CDC*).

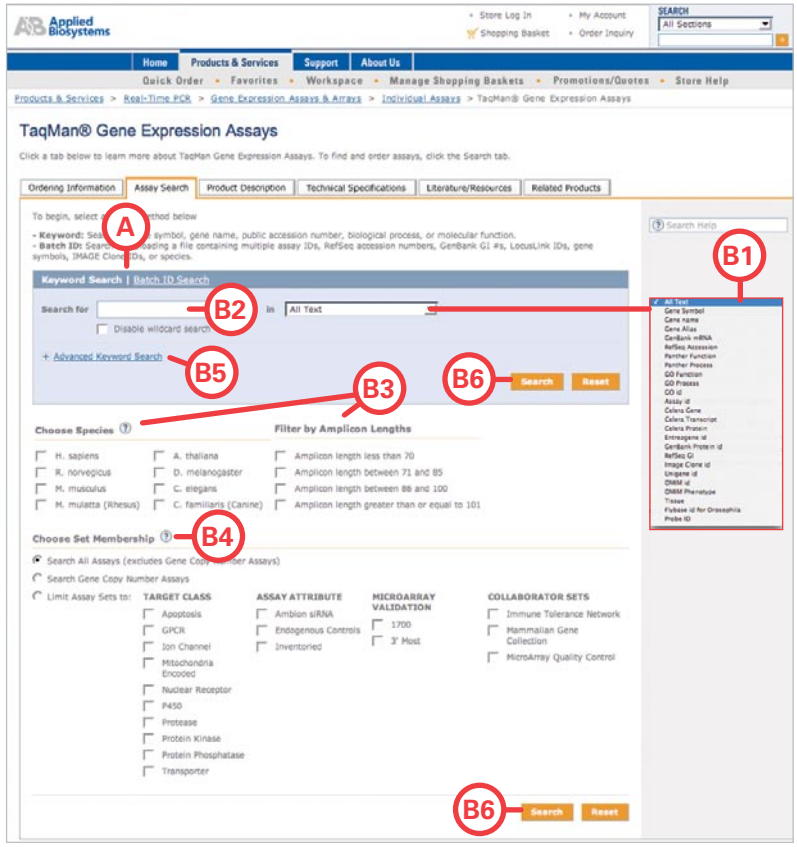
B3. (*Optional*) **Select** "Choose Species" and/or "Filter by Amplicon Lengths" options.

B4. *(Optional)* **Choose** "Set Membership" options.

B5. (*Optional*) **Choose** "Advanced Keyword Search."

B6. **Click** "Search."

See FAQ section at end of document for search tips.



C. Batch ID Search

The Batch ID Search helps you find a large number of assays at once, e.g., "Gene Symbol" or "Assay ID."

C1. **Select** "Option 1 Enter IDs." Enter or paste multiple IDs.
OR

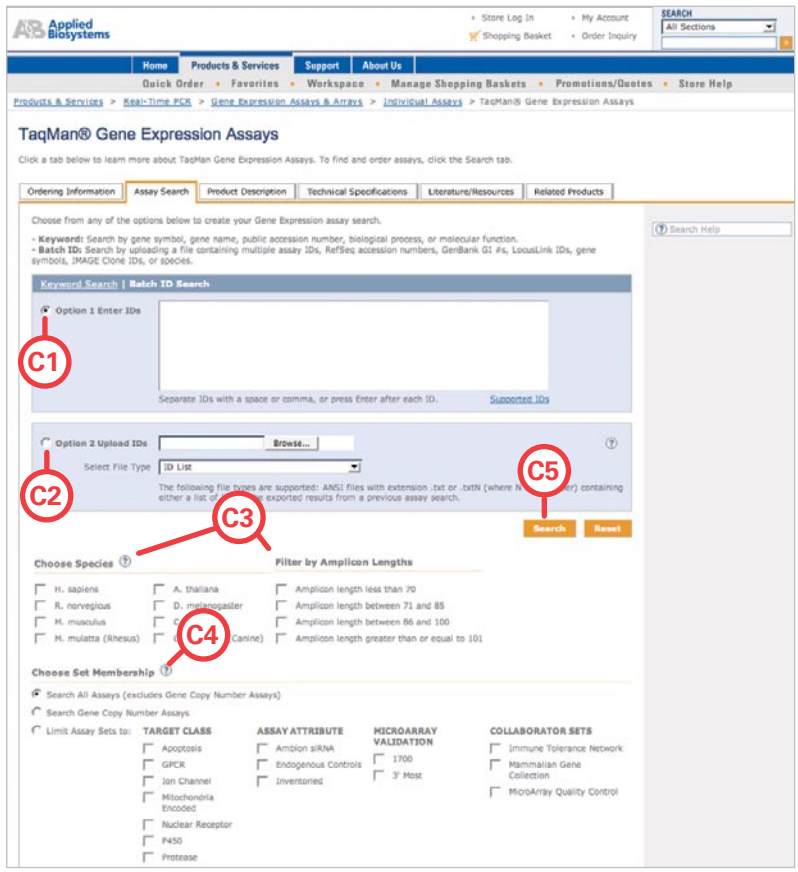
C2. **Select** "Option 2 Upload IDs." Upload the file containing multiple IDs.

C3. *(Optional)* **Select** "Choose Species" and/or "Filter by Amplicon Lengths" options.

C4. *(Optional)* **Choose** "Set Membership" options.

C5. **Click** "Search."

See FAQ section at end of document for search tips.



STEP 3: RESULTS

A. Click "?" for help.

B. Click "Log In" (Step 5) to add assays to shopping basket ("Add to Basket" button not shown).

C. Click on "Assay ID" to link to assay details page (see Step 4 below).

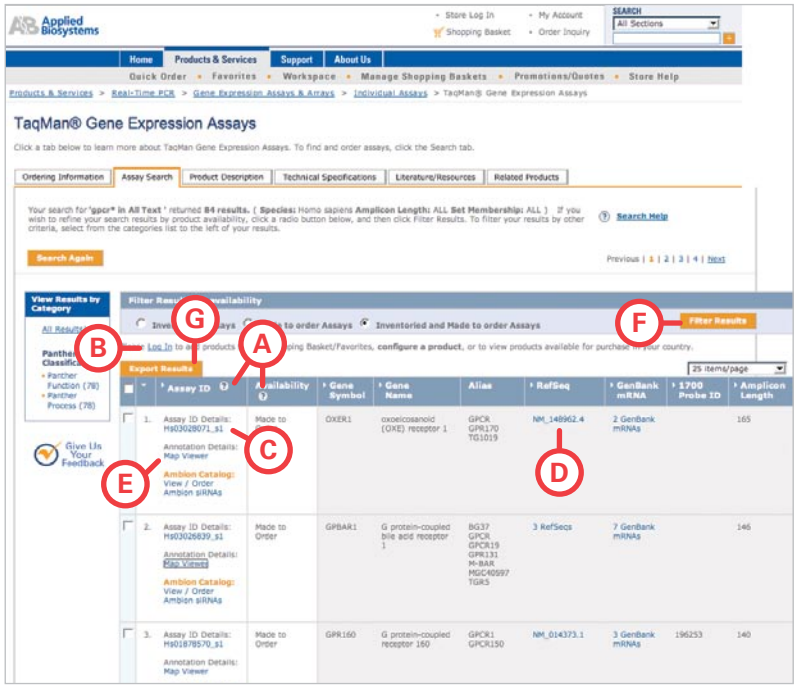
D. Click on RefSeq ID for more detailed information on the transcript.

E. *(Optional)* **Use** "Map Viewer" to graphically view the location of the assay within each transcript and its gene location.

F. *(Optional)* **Filter** results by Availability, Inventoried, or Made-to-Order Assays.

G. *(Optional)* **Click** "Export Results" to export to a text file.

Add to Basket **Add** assay to shopping basket (button appears after logging in).



STEP 4: ASSAY DETAILS PAGE

This page gives specific assay information such as gene name, transcripts detected, exon boundary, assay location, and much more. See FAQ and glossary section at end of document for definitions of these terms.

A. Click "?" for Map View help.

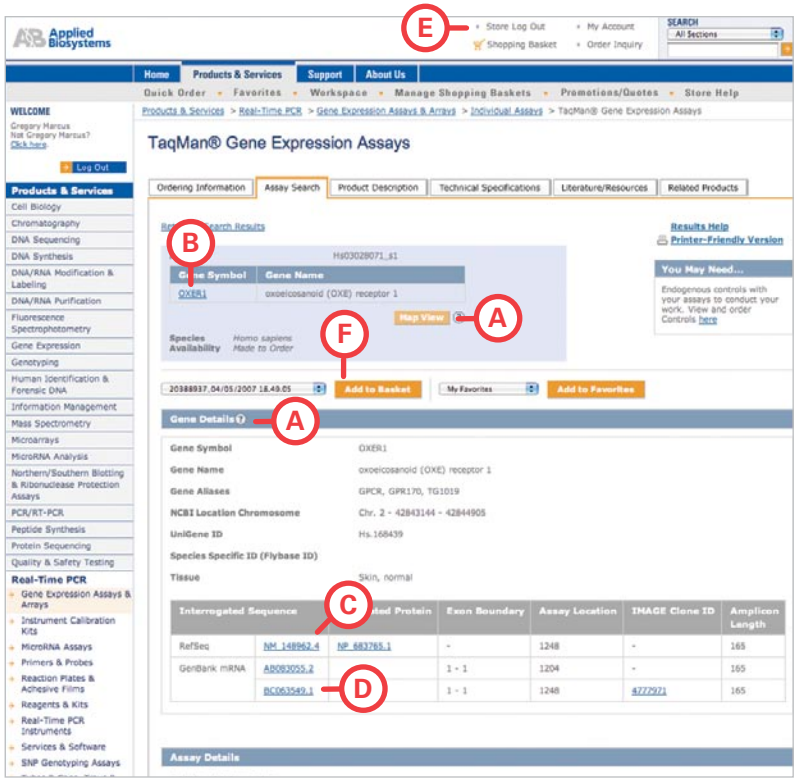
B. Link to Entrez Gene.

C. Link to RefSeq Sequence.

D. Link to GenBank mRNA.

E. Log in if you have not already done so.

F. Add desired assay to shopping basket.



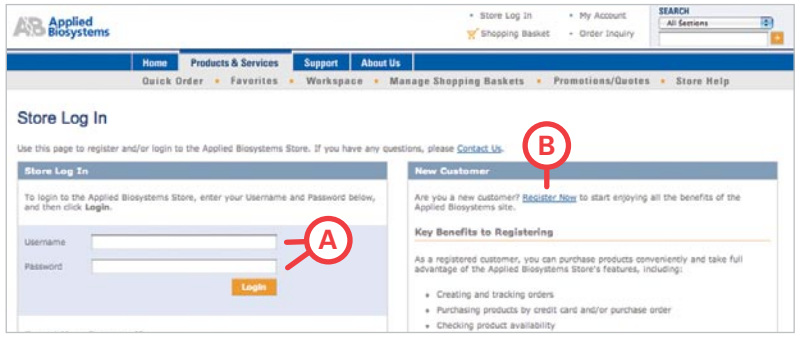
STEP 5: LOG IN

The login page can be reached from the search results or assay detail page. You will be returned to the same page after logging in.

A. Log in to add assays to your shopping basket and to place your order by entering your Username and Password.

OR

B. Register to obtain a user ID if you don't have one. Click "Register Now" and fill in the required fields.



STEP 6: SELECT ASSAYS

You may order assays from the search results page or from the assay detail page.

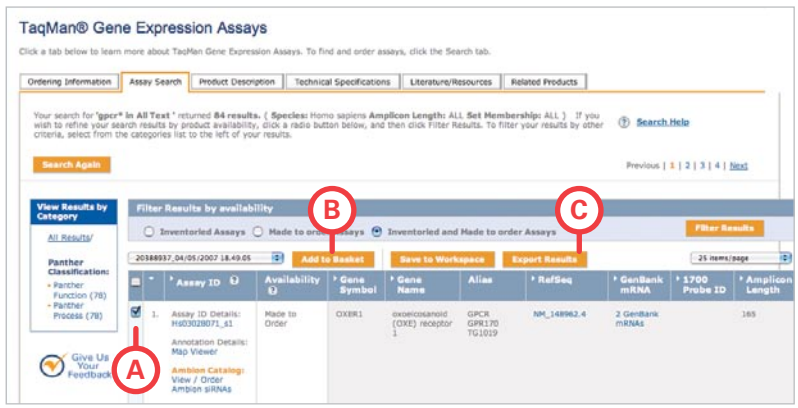
See FAQ section at end of document for tips on assay selection.

A. Check box to the left of desired assay(s).

Selected assays can then be:

B. Added to your ordering shopping basket.

C. Exported to a text (*.txt) file.



STEP 7: ORDERING

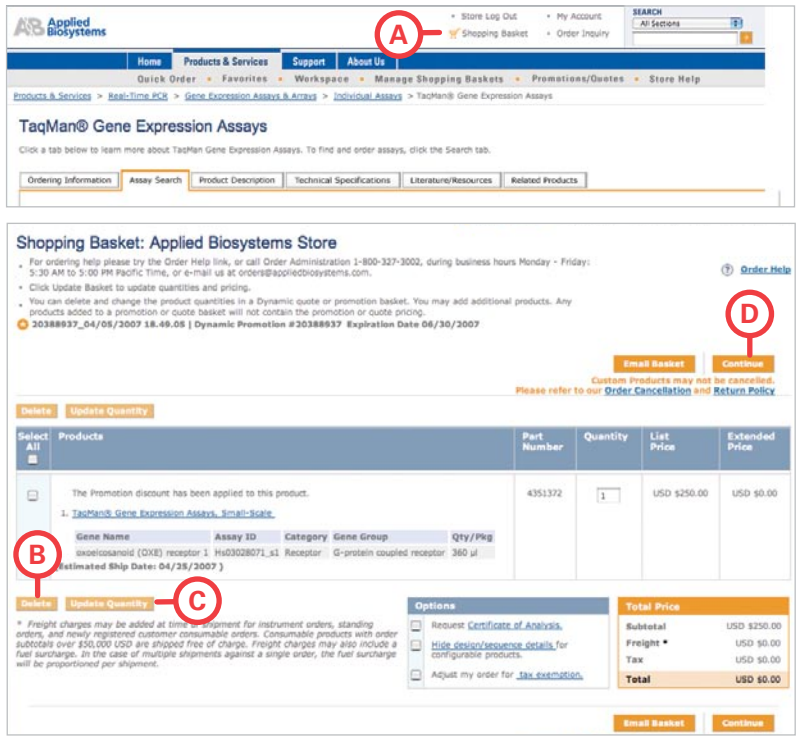
You must be logged in to place an order.

A. Click "Shopping Basket" in the upper right part of the page. Review shopping basket contents.

B. Select any assays that you do not want to order and click "Delete."

C. Update the quantity if multiple tubes are desired, and click "Update Quantity."

D. Click "Continue" when ready to check out. Provide information in the follow up screens (not shown).



GLOSSARY

Assay nomenclature: The first two letters in the Assay ID represent the species. The letters after the underscore give information about the assay placement.

Example Assay ID: Hs00380483_m1 (Human assay #00380483, which spans an exon junction.)

Hs – *Homo sapiens*
Mm – *Mus musculus*
Rn – *Rattus norvegicus*
Dm – *Drosophila melanogaster*
At – *Arabidopsis thaliana*
Ce – *Caenorhabditis elegans*
Cf – *Canis familiaris*
Rh – *Macaca mulatta (Rhesus)*

The gene expression Assay ID suffix indicates the assay placement:

- **"_m"** indicates an assay whose probe spans an exon junction and will not detect genomic DNA.
- **"_s"** indicates an assay whose primers and probes are designed within a single exon. Such assays will, by definition, detect genomic DNA.
- **"_g"** indicates an assay that may detect genomic DNA. The assay primers and probe may also be within a single exon.
- **"_mH," "_sH", or "_gH"** indicates that the assay was designed to a transcript belonging to a gene family with high sequence homology. The assays have been designed to give between 1,000–30,000-fold greater discrimination from the closest homologous transcript.
- **"_u"** indicates an assay whose amplicon spans an exon junction and the probe sits completely in one of the spanned exons.

Inventoried: Assays have already been manufactured and are available for shipment from Applied Biosystems. Delivered as 20X formulation, 250 total 20µL-reactions (1X primer concentrations, 900 nM; 1X probe, 250nM).

Made-to-Order: Assays that have been designed such that primer and probe sequences are available to begin manufacturing as soon as an order is received. Because these assays need to be manufactured, the delivery time is longer than that for inventoried assays. Delivered as 20X formulation, 360 total 20µL-reactions (1X primer concentrations, 900 nM; 1X probe, 250nM).

Amplicon length: Length of the PCR amplicon generated by the TaqMan® Assay. Shorter amplicons may be slightly more efficient.

Assay location: Refers to the nucleotide location that is the midpoint of the context sequence for the associated accession number. The context sequence is a 25bp sequence that contains the probe sequence. To find the context sequence, go to the assay location and count 12 bases on either side. TaqMan MGB probes are generally 15–18 bases long.

Example: CATTCTAGCTGATCATTGAGATGTCC
25bp context seq / probe seq Assay location

Exon boundary: This information gives the location of the probe. For example, "2 – 3" means that the TaqMan® probe of the assay was designed across the exon 2–exon 3 junction of the transcript (RefSeq, GenBank mRNA or Celera) listed. A probe that lies within a single exon will show that exon.

FAQ

What can I do if my search gives 0 results?
a) Use the "All Text" option in Step 2, B1 to widen your search.

b) If using gene symbols (e.g., IL2) try retyping without spaces and dashes.

c) If using RefSeq accession numbers (e.g., NM_014440.1), type in with correct syntax without any version number (e.g., NM_014440). Any version number (e.g., .1) should be eliminated.

d) Consider ordering a Custom TaqMan® Gene Expression Assay.

What can I do if my search gives too many results?
a) Restrict search by using Boolean advanced search or by adding species (Step 2, B3 or B5).

b) Limit your search with more restrictive terms such as gene symbol or RefSeq Accession number.

How can I get more info about the assay in its genomic context?
Entrez Probe at NCBI (**www.ncbi.nlm.nih.gov/entrez/**) provides more information about TaqMan Assays, including a Gene Viewer that shows all assays and other probes for the gene of interest.

How can I find out about pathway information?
a) The GeneAssist™ Pathway Atlas (**www.ambion.com/tools/pathway/all_pathway_list.php**) provides the ability to search or browse pathways by gene name or pathway name. The pathway of interest is displayed as a Pathway Map, a color graphical display of the pathway.

b) The Gene Ontology information on the assay information page gives information on disease, pathway and gene function.

Should I pick an Inventoried or Made-to-Order Assay?
All assays have been designed through the same validated bioinformatics process. Inventoried assays have the advantages of faster delivery time and smaller volumes. However, you should pick the assay that best suits your experiment. For example, if you're studying a particular splice variant, make sure the assay you choose detects a RefSeq or GenBank mRNA for that particular transcript. If you're doing microarray data validation, make sure the assay detects a transcript that matches the array probe or target.

What else do I need to order with the TaqMan Assays?
The following kits were developed and validated for use with TaqMan Assays:

- High Capacity cDNA Reverse Transcription Kit
- TaqMan® Gene Expression Master Mix
- TaqMan® Universal PCR Master Mix
- TaqMan® Endogenous Controls

Printed in the USA, 06/2007 Publication 127MI07-05

Applied Biosystems

Headquarters
850 Lincoln Centre Drive | Foster City, CA 94404 USA
Phone 650.638.5800 | Toll Free 800.345.5224
www.appliedbiosystems.com

International Sales
For our office locations please call the division headquarters or refer to our Web site at
www.appliedbiosystems.com/about/offices.cfm