Understanding Your Shipment

For use with single tube TaqMan® Assays

Pub. No. MAN0017153 Rev. A.0

Purpose

This document is provided to help you better understand the items included with your TaqMan® Assays shipment.

Items included in your shipment

Items included with every shipment:

- Dispatch Note (Packing List)—Contains your order information, a list of the assays that were ordered, and the quantity of the assays shipped.
- Box containing a storage rack with assay tubes.
 - **Note:** Assays from different TaqMan[®] product lines are grouped onto separate racks.
- Data Sheet—Provides a summary of the assays in your shipment, the assay details, and the storage conditions.

For further information about the assays, go to **www.thermofisher.com/taqmanfiles**. One or more of the following documents will be available for download, depending on the product ordered.

- Assay Information File
- User Instruction Documents (Protocols, User Guides, and Quick Reference Cards)
- Certificates of Analysis
- · Safety Data Sheets
- Data Sheets

Obtain your documents online

- 1. Go to thermofisher.com/taqmanfiles.
- 2. Select TaqMan® Assays

Download TaqMan $^{\mathsf{TM}}$ Assay / Plates & Cards Files



Enter your Sales Order # and Rack/Plate ID, then click Submit.

Download TagMan[™] Assay / Plates & Cards Files

Enter Sales Order # 0	Enter Rack/Plate ID Clear All
	Select Document Type:
100	 Download the current Rack/Plate ID •
Submit	 Show all the Rack/Plate IDs 0
I do not have this information	

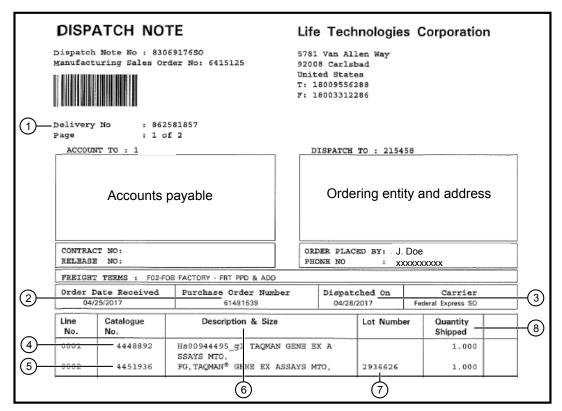
4. Select the type of files to download for your order.

TaqMan™ Assays	
Your Rack ID (Assay type)	Reference Documents for (your assay type

Note: Files are available for download in PC and MAC formats.

Dispatch Note

The **Dispatch Note** contains information specific to your shipment. This document is in an envelope that is labeled **Packing List Enclosed**. The envelope is attached to the outside of your shipping container.

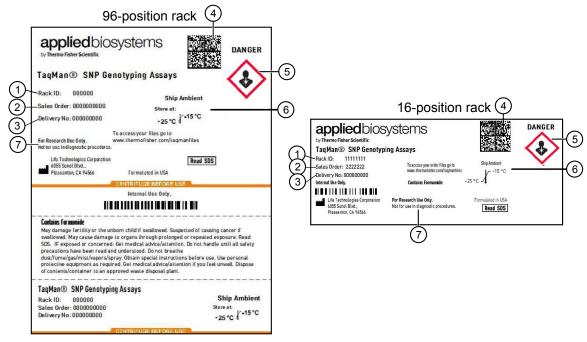


- ① Delivery number—A unique number that is assigned by Thermo Fisher Scientific to each customer shipment. This number matches the Delivery number that is listed on your box of assays.
- (2) Purchase order number—Customer-provided Purchase Order (P.O.) Number.
- ③ Dispatched on—The date the product is packaged for shipment (mm/dd/yyyy).
- (4) Catalog No. 001 (top)—The number that is used for reordering the product, sometimes called the **Part Number**. This catalog number matches the catalog number on your assay tube.
- (5) Catalog No. 002 (bottom)—An internal number that is used for tracking purposes. This catalog number does not match the catalog number on your assay tube.
- 6) Description & Size—The name and size of the item ordered.
- ② Lot Number—Manufacturing tracking number that is assigned by Thermo Fisher Scientific. This lot number does not match the lot number on your assay tube.
- 8 Quantity Shipped—The number of items in this shipment.

Note: Each item that is ordered displays two line items (duplicated under the Quantity Shipped heading). Only 1 item is included with your order.

TaqMan® Assays storage racks

Your shipment contains either 96- or 16-position racks. Racks are labeled with order-specific and product-specific information.



- (1) Rack ID—A unique number that is assigned to each rack, either 96- or 16-position.
- ② Sales Order Number—A unique number that is assigned to each customer Sales Order.
- 3 Delivery Number—A unique number that is assigned to each customer shipment.
- (4) Barcode—Used by Thermo Fisher Scientific to track your order and shipment.
- Warning—Information on potential hazards.
- 6 Storage Conditions—Instructions for product storage.
 - Note: Products are shipped at room temperature.
- Regulatory Statement—For Research Use Only. Not for use in diagnostic procedures.

Tube labels

All tube labels contain five lines of text.

- 1 Hs02876624_g1 2 GAPDH FAM 3 PN4453320 75ul 20X 4 Exp: mm/yyyy 55C02 5 Lot: P000000-000 A00
- Assay ID
- (2) Product-specific information [for example, gene symbol, RS number, assay name, dye label, primer limited (PL)]
- 3 Part Number, volume, and assay concentration
- (4) Expiration Date and Internal Processing Code
- (5) Lot Number and Manufacturing Order Group Well Location

Data Sheets

The Data Sheet provides a summary of the assays in a specific rack, and supporting details for those assays.

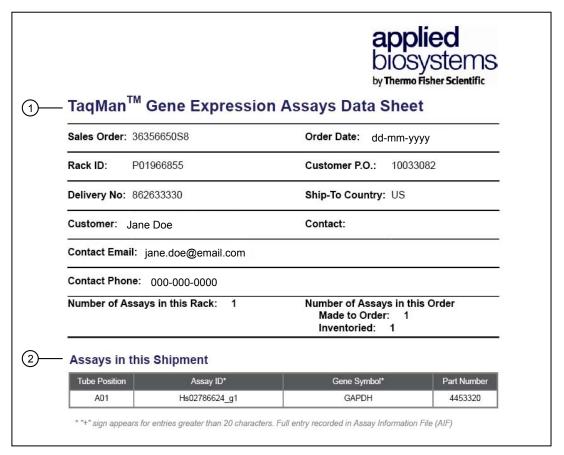


Figure 1 Data Sheet—Page 1

- (1) A summary of your order, including the order date, customer P.O. and contact information, Sales Order and Rack ID Numbers, number of assays in the rack, and the number of assays ordered.
- (2) Assays in this Shipment—Identification of the assays in your shipment by the Assay ID, target name, tube position in the rack, and Part Number.

Other Details



Assay Details

Part Number	Product	Reporter / Quencher	Volume (µL)	Formulation	No. of Reactions (20µL Reaction Size)
4331182	TaqMan TM Gene Expression Assays, Inventoried, SM	FAM/MGB-NFQ	250	20x Mix (TE)	250
4448892	TaqMan TM Gene Expression Assays, XS	FAM/MGB-NFQ	75	20x Mix (TE)	75
4351372	TaqMan TM Gene Expression Assays, SM	FAM/MGB-NFQ	360	20x Mix (TE)	360
4351370	TaqMan TM Gene Expression Assays, MED	FAM/MGB-NFQ	750	20x Mix (TE)	750
4351368	TaqMan TM Gene Expression Assays, LG	FAM/MGB-NFQ	967	60x Mix (TE)	2,900
4448489	TaqMan TM Gene Expression Assays, SM	VIC/MGB-NFQ	360	20x Mix (TE)	360
4448490	TaqMan TM Gene Expression Assays, MED	VIC/MGB-NFQ	750	20x Mix (TE)	750
4448491	TaqMan TM Gene Expression Assays, LG	VIC/MGB-NFQ	967	60x Mix (TE)	2,900
4448484	TaqMan TM Gene Expression Assays, Primer-Limited, SM	VIC/MGB-NFQ	360	20x Mix (TE)	360
4448485	TaqMan TM Gene Expression Assays, Primer-Limited, MED	VIC/MGB-NFQ	750	20x Mix (TE)	750
4448486	TaqMan TM Gene Expression Assays, Primer-Limited, LG	VIC/MGB-NFQ	967	60x Mix (TE)	2,900

(2)—

Storage Conditions

-25°C to -15°C



Supporting Documentation

Supporting documentation and files associated with this product are available for download at thermofisher.com/tagmanfiles:

- User Guide: "How to" guide for performing the application
- . Assay Information File (AIF): Technical details for all assays in the shipment
- Certificate of Analysis: Validation results for your assays
- Data Sheet: Electronic version of this document
- · Safety Data Sheet (SDS): Safety guidelines
- Quick Reference Card (QRC): Summary of the User Guide
- Understanding Your Shipment: Directory for understanding the contents of your shipment



Additional Quality Information

A standard certificate of analysis is included in the supporting documentation for this product. For additional quality information, visit https://documentation.org/length/



Technical Support

Visit www.thermofisher.com/contactus.

Limited product warranty

Life Technologies Corporation and/or its affiliate(s) warrant their products as set forth in the Life Technologies' General Terms and Conditions of Sale found on Life Technologies' website at www.thermofisher.com/us/en/home/global/terms-and-conditions. If you have any questions, please contact Life Technologies at www.thermofisher.com/support.

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Figure 2 Data Sheet—Pages 2 and 3

- ① Other Details—The formulation, product description, reporter/quencher, fill volume, concentration, and number of reactions.
- Storage Conditions—Instructions for product storage.
- (3) Supporting Documentation—Additional assay-related documentation that can be downloaded from thermofisher.com/taqmanfiles.
- 4 Additional Quality Information—Instructions for obtaining additional quality-related information.
- 5 Technical Support—Instructions for obtaining Thermo Fisher Scientific Technical Support.

Assay Information File

The Assay Information File is provided in TXT format, and/or in XML and HTML formats, depending on the product line and order date.

- HTML format files are provided as a reference for users; open them in a web browser.
- XML and TXT format files are provided primarily for electronic data importation and manipulation.

 Table 1
 Definitions for Assay Information File fields (alphabetical)

Field	Description	
AB Minor Allele Frequency—African- American	Minor allele frequency in a collection of 45 African American samples, as calculated by Applied Biosystems™	
AB Minor Allele Frequency—Caucasian	Minor allele frequency in a collection of 45 Caucasian samples, as calculated by Applied Biosystems™	
AB Minor Allele Frequency—Chinese	Minor allele frequency in a collection of 45 Chinese samples, as calculated by Applied Biosystems™	
AB Minor Allele Frequency—Japanese	Minor allele frequency in a collection of 45 Japanese samples, as calculated by Applied Biosystems™	
Amino Acid Change	(TaqMan® SNP Genotyping Assays only) The amino acid change associated with a coding SNP	
Amplicon Size	Size of the PCR amplification product	
Annotation Source	Public annotation source used for a specific product family	
Assay ID	Alphanumeric string that identifies the assay	
Assay Mix Concentration	Concentration of the assay mix (including all primers and probe components)	
Assay Name	For custom products, the customer-designated name of the sequence submitted; for predesigned assays, the Life Technologies-designated name assigned at the time of assay design	
Category	(TaqMan® Copy Number Assays only) Chromosome(s) targeted by the assay, based on Celera* Panther Protein Classification, Level 1	
Category ID	(TaqMan® Copy Number Assays only) Unique 10-digit ID for the category name	
Celera ^[1] Assembly Build Number	(TaqMan® SNP Genotyping Assays only) The version of the Celera assembly from which the coordinate position is taken	
Celera ID (for Predesigned assays)	For Predesigned TaqMan ^{fi} Gene Expression and SNP Genotyping Assays, this refers to the Celera ID—a unique transcript or SNP ID, respectively, in the Celera Discovery System (CDS)	
Celera SNP ID	(TaqMan® SNP Genotyping Assays only) The hCV SNP number in the Celera Discovery System (CDS)	
Chromosome	Chromosome on which the assay target (e.g., gene, SNP, intergenic region) is found	
Contact Name	Customer contact name provided with order submission	
Component Type	For kit products, this differentiates TM (TaqMan® Assay) or RT (Reverse Transcription primer) component	
Context Sequence	Nucleotide sequence surrounding the TaqMan® probe. For TaqMan® SNP Genotyping Assays, the sequence surrounding the target SNP. The first nucleotide in the brackets corresponds to the VIC™ allele and the second to the FAM™ allele. For TaqMan® MicroRNA Assay, the mature microRNA sequence itself	
Customer Name	Name of the customer's organization or institution	
Cytogenetic Band	Cytoband/chromosomal band location of assay target sequence	
Delivery Number	Unique number assigned to each customer shipment	
Design Strand	Strand used to design the TaqMan® probe	
DGV ^[2] Database Version	(TaqMan® Copy Number Assays only) Reference genome assembly version used by the Database of Genomic Variants (DGV)	
DGV** Locus Location	(TaqMan® Copy Number Assays only) Position on the reference genome of the DGV Locus	
DGV** Variation ID	(TaqMan® Copy Number Assays only) Target DGV Variation ID	
DGV** Variation Type	(TaqMan® Copy Number Assays) Type of genomic variation; for example, Copy Number	
Distance to Stem-Loop (TaqMan® MicroRNA Assays only)	Distance from TaqMan® MicroRNA Assay context sequence to the base of the stem-loop sequence	
Entrez Gene ID	The Entrez Gene database numeric identifier for the interrogated gene (www.ncbi.nlm.nih.gov/gene)	

Field	Description	
Expiration Date	Expiration date of the assay	
Forward Primer Concentration	Concentration (in µM) of the forward PCR primer	
Forward Primer Name	Name of the forward PCR primer, given by the design software; consists of the Assay ID or Assay Name, with an F suffix	
Forward Primer Sequence	Nucleotide sequence of the forward PCR primer	
Gene Name	Gene name in the Entrez Gene database	
Gene Symbol	Entrez Gene symbol for the interrogated gene	
Group	(Copy number assays only) Based on Celera* Panther Protein Classification, Level 2	
Group ID (TaqMan® Copy Number Assays only)	Unique 10-digit ID for the group name	
HapMap Minor Allele Freq—CEU (TaqMan® SNP Genotyping Assays only)	Minor allele frequency in CEPH (Utah residents with ancestry from northern and western Europe), as calculated by the HapMap Project	
HapMap Minor Allele Freq—CHB (TaqMan® SNP Genotyping Assays only)	Minor allele frequency in Han Chinese in Beijing, China, as calculated by the HapMap Project	
HapMap Minor Allele Freq—JPT (TaqMan® SNP Genotyping Assays only)	Minor allele frequency in Japanese in Tokyo, Japan, as calculated by the HapMap Project	
HapMap Minor Allele Freq—YRI (TaqMan® SNP Genotyping Assays only)	Minor allele frequency in Yorubans in Ibadan, Nigeria, as calculated by the HapMap Project	
Location on Celera* Assembly (SNP genotyping assays only)	The nucleotide location on the Celera* human genome assembly (as referenced)	
Location on NCBI Assembly	Nucleotide location on the NCBI genome assembly of the assay target. It is near the base location in the middle of the context sequence	
Lot Number	Unique identifier assigned to each manufacturing lot	
Location on Transcript or Gene	The assay's nucleotide location on the target transcript or gene. For TaqMan® Gene Expression Assays, it is the target location on the first RNA accession that is listed. For TaqMan® Copy Number Assays, it is the exon and/or intron gene location	
Mapping Date	Date that Thermo Fisher Scientific completed assay mapping	
Mature MicroRNA Accession	(TaqMan® MicroRNA Assays only) miRBase ^[3] microRNA name	
Medline Reference	PubMed references for the gene	
Minor Allele Frequency— African-American	(TaqMan® SNP Genotyping Assays only) Minor allele frequency in African-Americans, as calculated by SNP genotyping at Thermo Fisher Scientific	
Minor Allele Frequency—Caucasian	(TaqMan® SNP Genotyping Assays only) Minor allele frequency in Caucasians, as calculated by SNP genotyping at Thermo Fisher Scientific	
Minor Allele Frequency—Chinese	(TaqMan® SNP Genotyping Assays only) Minor allele frequency in Chinese people, as calculated by SNP genotyping at Thermo Fisher Scientific	
Minor Allele Frequency—Japanese	(TaqMan® SNP Genotyping Assays only) Minor allele frequency in Japanese people, as calculated by SNP genotyping at Thermo Fisher Scientific	
NCBI Assembly Build Number	The version of the NCBI reference genome assembly used for assay target location	
NCBI Gene Reference	NCBI transcript ID that is detected by the assay	
NCBI Reference SNP ID	(TaqMan® SNP Genotyping Assays only) The reference SNP number (RS Number) in the NCBI-dbSNP database	
NCBI SNP Reference	(TaqMan® SNP Genotyping Assays only) Reference from the NCBI-dbSNP database	
Order Number	A customer sales order number assigned by Thermo Fisher Scientific, unique to an order	
Part Number ^[4]	Product number used in conjunction with the Assay ID to order the assay	
Product Type	Thermo Fisher Scientific product category or family (corresponds with the part number)	
Rack or Plate ID	Unique number on the label of each rack or plate; also referred to as Rack ID	

Field	Description	
Rack or Plate Type	Type of container in which the assay is shipped (e.g., 96- or 16-position rack)	
Reporter 1 Concentration	Concentration (in µM) of reporter 1 TaqMan® probe	
Reporter 1 Dye	Dye label for reporter 1 TaqMan® probe	
Reporter 1 Name	Name for the reporter 1 TaqMan® probe, determined by the design software. It consists of the Assay ID or Assay Name, with a suffix that contains a letter to indicate the dye label (M for FAM™ dye and V for VIC™ dye). Some assays also include a number to indicate which DNA strand was used to design the probe: 1 indicates that the forward strand was used to design the probe; 2 that it was the reverse strand; and 3 that the design strand is not identified.	
Reporter 1 Quencher	Quencher used for reporter 1 TaqMan® probe, for example, nonfluorescent quencher (NFQ)	
Reporter 1 Sequence	Nucleotide sequence of reporter 1 TaqMan® probe	
Reporter 2 Concentration	(TaqMan® SNP Genotyping Assays only) Concentration (in µM) of reporter 2 TaqMan® probe	
Reporter 2 Dye	(TaqMan® SNP Genotyping Assays only) Dye label for reporter 2 TaqMan® probe	
Reporter 2 Name	Name for the reporter 2 TaqMan® probe, determined by the design software. It consists of the Assay ID or Assay Name, with a suffix that contains a letter to indicate the dye label (M for FAM™ dye). Some assays also include a number to indicate which DNA strand was used to design the probe: 1 indicates that the forward strand was used to design the probe; 2 that it was the reverse strand; and 3 that the design strand is not identified.	
Reporter 2 Quencher	(TaqMan® SNP Genotyping Assays only) Quencher used for reporter 2 TaqMan® probe	
Reporter 2 Sequence	(TaqMan® SNP Genotyping Assays only) Nucleotide sequence of reporter 2 TaqMan® probe	
Reverse Primer Concentration	Concentration (µM) of the reverse PCR primer	
Reverse Primer Name	Name for the reverse primer, given by the design software; consists of the Assay ID or Assay Name, with an R suffix	
Reverse Primer Sequence	Nucleotide sequence of the reverse PCR primer	
RNA Database ^[5] Gene Symbol	The RNA database gene symbol for the interrogated gene product	
RNA Database ID	The RNA database identifier for the interrogated gene	
RT Primer Sequence	Sequence of the RT primer for the interrogated transcript	
Sanger dB Link	(TaqMan® MicroRNA Assays only) Link to microRNA page on the miRBase ^[3] database website (based on accession #)	
Sales Order Number	A customer sales order number assigned by Thermo Fisher Scientific, unique to an order	
Ship Date	Date that the product is shipped	
Shipment ID	Unique number assigned to each customer shipment	
(Shipping) Rack or Plate ID	Unique number on the label of each rack or plate; also referred to as Rack ID	
(Shipping) Rack or Plate Type	Type of container in which the assay is shipped (e.g., 96- or 16-position rack)	
SNP Type	(TaqMan® SNP Genotyping Assays only) Type of SNP, e.g., intron, acceptor splice site, donor splice site, intergenic/unknown, etc.	
Species	Organism for which the assay was designed	
Stem-Loop Chromosome Location	(TaqMan® MicroRNA Assays only) Genomic position of stem-loop sequence	
Stem-Loop ID	(TaqMan® MicroRNA Assays only) miRBase ^[3] stem-loop alphanumeric identifier	
Target Exons	Exons (as referenced by the public accession number) that are spanned by the probe	
Target Type	Target sequence identifier (for example, Gene Symbol, Reference SNP (RS) Number, etc.)	
Target Value	Publicly available gene or RNA name, or customer-provided identifier	
Transcript Accession	The NCBI alphanumeric sequence identifier for the interrogated transcript	
Tube/Well Position	Well location of the assay in the rack or plate	
Vial (or Tube) ID	10-digit number that uniquely identifies each tube	

Field	Description	
Vial (or Tube) Type	Type of vial or tube containing the assay	
Well Location	Well location of the assay in the rack or plate	
XML Template Version	Version of the XML template used for the Assay Information File	

 $^{^{[1]}}$ Historical reference to Celera Discovery System

User Instruction Documents

A specific set of user instruction documents is provided with each TaqMan Assay product. These documents can include protocols, quick reference cards, and user guides for products and software. For example, user documents that are provided with TaqMan Gene Expression Assays and Custom TaqMan Gene Expression Assays include the following:

- User Protocol—A detailed guide that provides step-by-step instructions for using the product.
- Quick Reference Card—A shorter summary of the key steps in the User Protocol. This guide is designed for use by experienced users.
- Design and Ordering Guide—A guide that provides step-by-step instructions for designing and ordering Custom TaqMan® Gene Expression Assays and Custom TaqMan® SNP Genotyping Assays.

Database of Genomic Variants (DGV), http://projects.tcag.ca/variation/. lafrate AJ, Feuk L, Rivera MN et al. (2004) Detection of large-scale variation in the human genome. Nat Genet 36(9):949–51.

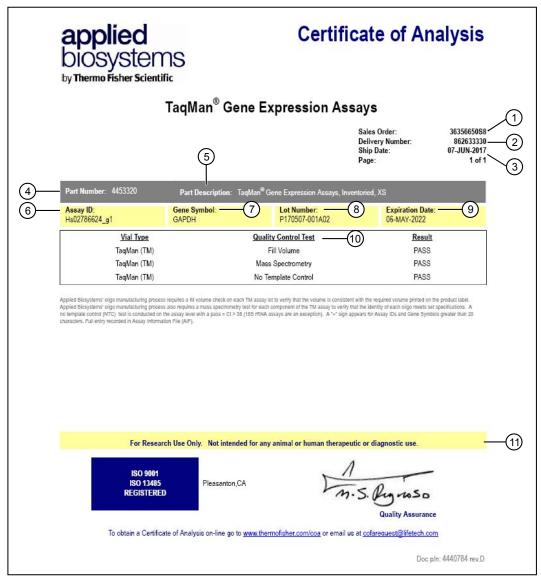
^[3] miRBase microRNA database, http://www.mirbase.org. Griffiths-Jones S, Saini HK, van Dongen S, Enright AJ (2008) Nucl Acids Res 36(Database Issue):D154-D158.

^[4] Part numbers for Predesigned, Custom, and Custom Plus Assays reflect assay scale and whether it is a human or nonhuman target.

^[5] Mammalian noncoding RNA database (RNAdb), http://research.imb.uq.edu.au/rnadb/. Pang KC, Stephen S, Engstrom PG et al. (2005) RNAdb - a comprehensive mammalian noncoding RNA database. Nucl Acids Res 33 (Database Issue): D125–D130.

Certificates of Analysis

The Certificate of Analysis contains assay quality information.



- ① Sales Order—A unique number that is assigned by Thermo Fisher Scientific to each customer Sales Order.
- (2) Delivery Number—A unique number that is assigned by Thermo Fisher Scientific to each customer shipment.
- 3 Ship Date—The date the product is packaged for shipment (mm/dd/yyyy).
- (4) Part Number—The number that is used for (re)ordering the product; sometimes called the Product Number.
- (5) Part Description—The unique name for part and scale; based on Part Number.
- 6 Assay ID—A unique identifier that is assigned by Thermo Fisher Scientific to each assay.
- (7) Assay-Related Target—Field heading and content varies by TaqMan® Assay type (for example, Gene Symbol for gene expression assays, RS Number for SNP assays, Gene Identifier for non-coding RNA, or Assay Name for custom, small RNA, or pri-miRNA assays).
- (8) Lot Number—A unique identifier that is assigned to each manufacturing batch; allows Thermo Fisher Scientific to identify the manufacturing site and date of manufacture.
- (9) Expiration Date—The date after which the material should no longer be used by the customer.
- 10 Quality Control—List of quality control tests, confirmation that they were completed, and results [pass/fail/previously passed (TaqMan® SNP Genotyping Assays only)].
- Regulatory Statement—For Research Use Only. Not intended for any animal or human therapeutic or diagnostic use.

Safety Data Sheets

The material Safety Data Sheet (SDS) provides important safety information about your shipment. It includes information on the composition and properties of hazardous materials in the shipment; handling, storage, and disposal of these materials; and regulatory information by geographic location.



Figure 3 Sample Safety Data Sheet

Limited product warranty

Life Technologies Corporation and/or its affiliate(s) warrant their products as set forth in the Life Technologies' General Terms and Conditions of Sale found on Life Technologies' website at www.thermofisher.com/us/en/home/global/terms-and-conditions.html. If you have any questions, please contact Life Technologies at www.thermofisher.com/support.



Manufacturer: Multiple Life Technologies Corporation manufacturing sites are responsible for manufacturing the products associated with the workflow covered in this quide.

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Revision History: Pub. No. MAN0017153

Revision	Date	Description
A.0	13 July 2017	New document. Supersedes publication number C016152 1210 Rev E.

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