



The Cryogenic Label Guide

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Overview

About This Guide

This comprehensive guide is for anyone working in a biobank and life science professionals seeking a reliable way of identifying and tracking biological samples destined for long-term cryogenic storage in liquid nitrogen or ultra-low temperature freezers.

LabTAG's PhDs and scientists created this guide to show fellow life science professionals the path to efficient, accurate, error-free, and successful cryogenic identification. We aim to empower you with this knowledge so that you may navigate our products and decide which are right for you. This guide is part of the ultimate solution, and we are here for you every step of the way.

Note: All the labels and tapes listed in this guide are rated to resist liquid nitrogen (-196°C) unless specified otherwise (at -80°C).



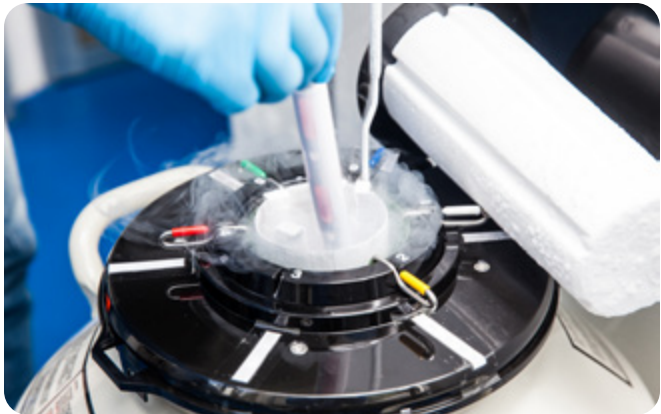
Who We Are

For over two decades, LabTAG® has innovated and developed laboratory labels and labeling solutions that satisfy the stringent requirements of identification in harsh environments. Our success can be attributed to our vast catalog of application-specific cryo labels — a concept we are delighted to have pioneered. We're proud to have the most extensive catalog of cryogenic labels in the world.



Cryogenic Labels Must Not Fail

Storage in liquid nitrogen and laboratory freezers poses a risk to accurate sample identification, as specimen labels can detach, become smudged, or faded. The result of label failure can be catastrophic to any organization. It's important to choose labels that you can rely on.



The Process of Choosing a Cryogenic Label

When choosing a label, you should invariably ask yourself the following questions, in this order:

1

What type of container am I trying to label?

Tubes, vials, boxes, plates, racks, straws.

2

What environmental conditions will the container be subject to?

Water, frost, chemicals, heat.

3

Do I require any special features?

Color, transparency, permanent or removable adhesive, tamper-evidence.

4

What printing method and format can I choose from?

Laser, inkjet, thermal-transfer, direct thermal, DYMO.

If you find yourself in a particular case where your requirements have no available options, you can always take advantage of our.

LabTAG's Cryogenic Labels

LabTAG has an extensive catalog of cryogenic labels that each fulfill a different purpose. This table outlines our cryo label classes and their main differentiating attributes, which you should consider when assessing your needs. These classes are available in many sizes, colors, and configurations, which are identifiable by SKU#.



L: Laser

I: Inkjet

H: Hand-Writable

TT: Thermal-Transfer

DT: Direct Thermal

DY-4: DYMO® LabelWriter™ 4-Series

DY-5: DYMO® LabelWriter™ 5-Series

Brand	Class	Printing Method	Format	Lower Temp.	Upper Temp.	Feature	Recommended Application Surface	Adhesive
Cryo-LazrTAG™	CL	L	Sheet	-196°C	+120°C	Standard	Vials, Tubes, Boxes	Permanent
	CLH	L	4" x 6" Sheet	-196°C	+120°C	Standard	PCR Tubes & Vials	Permanent
	RCL	L	Sheet	-196°C	+120°C	Standard	Vials, Tubes, Boxes	Removable
	DFSL	L	Sheet	-196°C	+150°C	Wrap, Autoclave	Vials & Tubes	Permanent
	DFLT	L	Sheet	-196°C	+150°C	Clear, Autoclave	Vials & Tubes	Permanent
	TRCL	L	Sheet	-196°C	+120°C	Clear	Flat Surfaces	Removable
Lab-Tag™	LT, JTA, JTRA, LTR	H	4" x 6" Sheet, Roll	-196°C	+110°C	Standard	Vials & Tubes	Permanent
NitroTAG®	JTTA	TT	Roll	-196°C	+110°C	Standard	Vials, Tubes, Boxes	Permanent
	SPJTTA	TT	Roll	-196°C	+110°C	SimPEEL	Vials & Tubes	Permanent
CryoSTUCK®	LCS	L	Sheet	-196°C	+100°C	Standard	Frozen Vials, Tubes, & Boxes	Permanent
	LCY	L	Sheet	-196°C	+121°C	Clear	Frozen Vials, Tubes, & Boxes	Permanent
	LCB	L	Sheet	-196°C	+121°C	Cover-Up	Frozen Vials, Tubes, & Boxes	Permanent
	UC	TT	Roll	-196°C	+121°C	Standard	Frozen Vials, Tubes, & Boxes	Permanent
	SPUC	TT	Roll	-196°C	+121°C	SimPEEL	Frozen Vials, Tubes, & Boxes	Permanent
	BUC	TT	Roll	-196°C	+121°C	Cover-Up	Frozen Vials, Tubes, & Boxes	Permanent
	AHA	TT	Roll	-196°C	+100°C	Clear	Frozen Vials & Tubes	Permanent
	DTU	DT	Roll	-196°C	+70°C	Standard	Frozen Vials & Tubes	Permanent
	SPDTU	DT	Roll	-196°C	+70°C	SimPEEL	Frozen Vials & Tubes	Permanent
	EDCS	DY-4	Roll	-196°C	+70°C	Standard	Frozen Vials & Tubes	Permanent
	SPEDCS	DY-4	Roll	-196°C	+70°C	SimPEEL	Frozen Vials & Tubes	Permanent
	LWCS	DY-5	Roll	-196°C	+70°C	Standard	Frozen Vials & Tubes	Permanent

Brand	Class	Printing Method	Format	Lower Temp.	Upper Temp.	Feature	Recommended Application Surface	Adhesive
Cryo-JetTAG™	CIJ	I	Roll	-196°C	+120°C	Standard	Vials & Tubes	Permanent
	CIJSA	I	Sheet	-196°C	+121°C	Standard	Vials & Tubes	Permanent
MetaliTAG™	AWB	TT	Roll	-196°C	+100°C	Standard	Metal Racks & Canes	Permanent
	AWC	TT	Roll	-196°C	+100°C	Clear	Metal Racks	Permanent
PinTAG™	JTTA	TT	Roll	-196°C	+110°C	Standard	2-D Barcoded Tubes	Permanent
	CL	L	Sheet	-196°C	+120°C	Standard	2-D Barcoded Tubes	Permanent
Cryo-WrapTAG™	HBTT	TT	Roll	-196°C	+100°C	Wrap	Vials & Tubes	Permanent
	CATT	TT	Roll	-196°C	+150°C	Wrap, Autoclave	Vials & Tubes	Permanent
Cryo-StrawTAG™	CST	TT	Roll	-196°C	+80°C	Wrap	IVF straws	Permanent
Cryo C-KurTAG™	TELA	TT	Roll	-196°C	+110°C	Tamper-Evident	Vials, Boxes	Permanent
	CTDB	TT	Roll	-196°C	+100°C	Destructible	Vials, Boxes	Permanent
Cryo-DTermo™	ED1F, EC1F, EF1F, EG1F	DY-4	Roll	-196°C	+70°C	Standard	Vials, Boxes	Permanent
Cryo-DirectTAG™	DFP, DFPC	DT	Roll	-196°C	+70°C	Standard	Vials, Tubes, Boxes	Permanent
Cryo-OmniTAG™	HBCL	TT	Roll	-196°C	+100°C	Clear	Vials & Tubes	Permanent



Containers

The first and most important factor to consider is the type of container you intend to label. Depending on the container's material, curvature, and dimensions, you will require labels made of different materials, flexibility, adhesive, and size. At LabTAG, we have a variety of classes available in different sizes, designed to fit any cryo container.



	Vial/Tube	Max. Usable Label Area	Suggested Product (Roll)	Suggested Product (Sheet)
A	0.2 ml (PCR)	0.75" x 0.28" / 19mm x 7mm	JTTA-213 0.75" x 0.2" / 19.1mm x 5.1mm	CLH-2 0.79" x 0.2" / 20mm x 5.1mm
B	0.5 ml (Eppendorf™)	0.87" x 0.59" / 22mm x 15mm	JTTA-51 0.75" x 0.4" / 19.1mm x 10.2mm	CL-12* 0.94" x 0.5" / 23.9mm x 12.7mm
C	1.4 ml (2D Barcoded Tubes)	1.81" x 1" / 46mm x 25mm	JTTA-553NPSB 1.26" x 0.3" / 32mm x 7.6mm	CL-123T1 1.81" x 0.625" / 46mm x 15.9mm
D	1 ml (skirted)	1.14" x 0.75" / 29mm x 19mm	JTTA-4 1" x 0.75" / 25.4mm x 19.1mm	CL-32 0.94" x 0.78" / 23.9mm x 19.8mm
E	1.5 ml (Eppendorf™)	1.14" x 0.71" / 29mm x 18mm	JTTA-7 1" x 0.5" / 25.4mm x 12.7mm	CL-12 0.94" x 0.5" / 23.9mm x 12.7mm
F	1.8 – 2 ml (skirted)	1.26" x 1.1" / 32mm x 28mm	JTTA-29 1" x 1" / 25.4mm x 25.4mm	CL-71 1" x 1" / 25.4mm x 25.4mm
G	5 ml (skirted)	3" x 1.38" / 75mm x 35mm	JTTA-28 2" x 1" / 50.8mm x 25.4mm	CL-33 1.97" x 0.97" / 50mm x 24.6mm
H	15 ml (conical tube)	3.35" x 1.73" / 85mm x 44mm	JTTA-5 2.5" x 1" / 63.5mm x 25.4mm	CL-3 2.63" x 1" / 66.8mm x 25.4mm
I	50 ml (conical tube)	3.39" x 3.23" / 86mm x 82mm	JTTA-238 2.5" x 1.5" / 63.5mm x 38.1mm	CL-29 2.83" x 1.57" / 72mm x 39.9mm
J	13 x 75 mm (blood collection vial)	2" x 1.57" / 50mm x 40mm	JTTA-28 2" x 1" / 50.8mm x 25.4mm	CL-33 1.97" x 0.97" / 50mm x 24.6mm
K	13 x 100 mm (blood collection vial)	2.95" x 1.57" / 75mm x 40mm	JTTA-5 2.5" x 1" / 63.5mm x 25.4mm	CL-3 2.63" x 1" / 66.8mm x 25.4mm
L	16 x 100 mm (blood collection vial)	2.95" x 2" / 75mm x 50mm	JTTA-5 2.5" x 1" / 63.5mm x 25.4mm	CL-3 2.63" x 1" / 66.8mm x 25.4mm
M	16 x 125 mm (blood collection vial)	4" x 2" / 100mm x 50mm	JTTA-36 3" x 1" / 76.2mm x 25.4mm	CL-3 2.63" x 1" / 66.8mm x 25.4mm

*Slight overlap on 0.5ml tubes

Note: Refer to the illustration on the next page

Tubes & Vials

Plastic or glass tubes and vials may be identified using labels affixed to either the side or top of the container or both. As many cryogenically stored containers are used for cell culture, labels must also be resistant to spraying and wiping with alcohols. It is also important that the label fits securely on the container.

Our **NitroTAG®** and **Cryo-LazrTAG™** are the workhorses of our cryogenic labels. They fully withstand cryogenic conditions and come in a variety of different sizes to fit almost any tube, vial, and many other lab containers. DYMO-branded **LWCS-class** labels are also available, for printing with DYMO 5-series printers. We also offer **SnapPEEL™** labels, specifically designed to label the top and side of cryo vials and tubes quickly and effortlessly. Many other classes are available in sizes perfect for identifying tubes and vials, with varying properties such as removable adhesive, tamper-evidence, and other special features.



2D-Barcoded Tubes

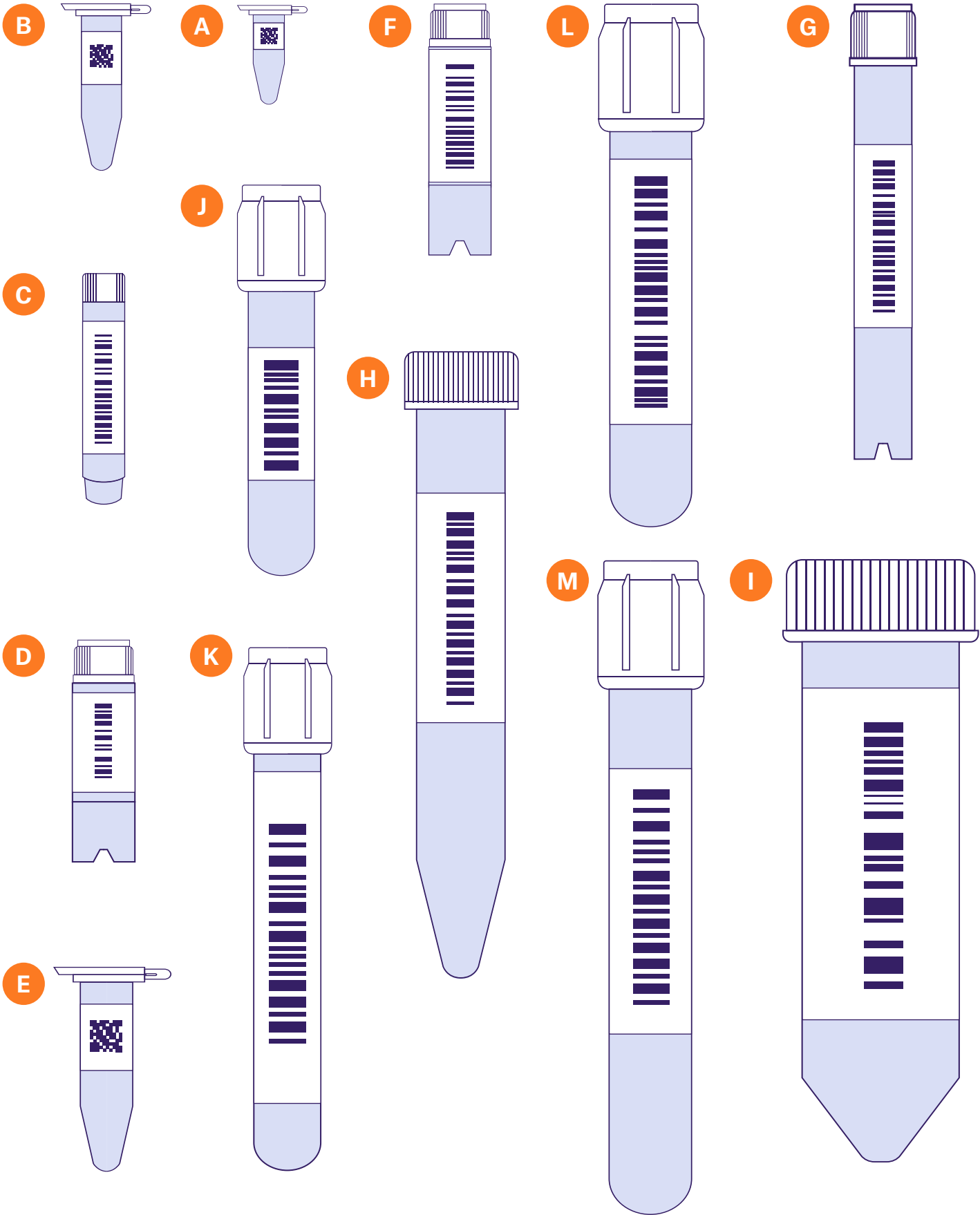
2D-barcoded tubes are a great way to store samples. Their thin profile and barcoded bottom allow them to be space-efficient, ideal for lab automation. However, they offer limited control over the encoded data and lack the ability to customize human-readable text and numbers.

LabTAG has fixed this problem with our patent-pending **PinTAG™** labels, which are designed to simultaneously label the side and bottom of 2D sample storage tubes with human-readable text, as well as 1D and 2D barcodes. They are also fully compatible with automated readers, liquid handlers and can be integrated with inventory management systems.

PinTAG offers you maximum control over the encoded information when sampling or aliquoting specimen libraries, allowing the receiving vials to be labeled with identical or custom data. They also withstand long-term storage in cryogenic conditions, specifically liquid nitrogen. Available for printing with thermal-transfer or desktop laser printers.

Tubes & Vials Illustrations

Scale: 100%



Storage Boxes & Plastic Plates

NitroTAG labels can also adhere to cardboard or plastic storage boxes and plastic plates that are stored cryogenically. However, **NitroTAG** labels are permanent, which is not ideal for boxes and plates that require re-labeling. We offer two classes of cryogenic labels, **RCL** and **TRCL**, that are made with a removable adhesive and can be used for boxes and plates. Note that these two classes are for laser printers only. If you require removable labels for plates that are thermal-transfer printable, we manufacture **PlateTAG™**, **AMA** and **RMTT** label classes; however, these labels are only applicable for plates and containers stored at -80°C.

Cryogenic tape is another common method of identifying storage boxes destined for liquid nitrogen and low-temperature freezers. Our patent-pending **CryoHUG™**, an adhesive-free tape, is the best solution for boxes, bottles, and even tubes and vials that require tape to seal them prior to storage. If you require tape with a permanent adhesive, **NitroTAPE™**, which uses the same adhesive and face stock as **NitroTAG**, is recommended. Our latest innovation in lab tape technology is **GatorCUT™**, allowing you to manually cut your tape without the need for scissors.



Metal Racks & Canes

Metal surfaces require a special adhesive that allows the label to stick in cryogenic conditions. For this purpose, we offer **MetaliTAG™**, a brand of cryo labels specially designed for these containers. These labels share many of the same properties as other cryogenic labels but are tailored for metal surfaces, including aluminum cryo canes, stainless-steel canisters, and racks. **Cryogenic tags** for metal racks are also available. These hanging tags allow metal racks to be clearly identified and can be inscribed using permanent cryo markers.



Cryo Straws

Cryo straws require specialized labels that are both cryogenic and low emitters of volatile organic compounds (VOCs), particularly for in vitro fertilization (IVF) clinics. **Cryo-StrawTAG™** is our brand of wrap-around labels, with a strong cryo-adhesive that easily conforms to the small diameter of standard and high-security cryo straws as well as other vitrification devices and remains permanently attached during snap-freezing and long-term cryogenic storage (-196°C/-321°F).

Environmental Conditions

The next step in the decision-making process is determining the environment in which the label must perform. Apart from cryogenic freezing, you may require a label that performs in different environmental conditions, such as being able to adhere to wet or frozen surfaces, resist chemical exposure, or high-heat sterilization.



Wet Surfaces

All our cryo labels are waterproof when applied to a dry surface. Applying cryo labels to already wet surfaces, however, is a different scenario. Wet surfaces, including containers removed from water baths and other solutions, require a special adhesive to label properly. Our **NitroTAG** labels are designed to withstand low temperatures and be applied to wet surfaces with zero cure time.



Frozen Surfaces

Frozen tubes and vials are much harder to label due to the low affinity of most adhesives for extremely cold surfaces. To meet this need, LabTAG manufactures **CryoSTUCK** labels that can be applied directly to frozen tubes or vials at -80°C and placed back in liquid nitrogen immediately, maintaining the integrity of your samples.



High Temperatures

You may require labels that are both cryogenic and resist high-heat sterilization protocols, such as steam autoclaving, boiling water, and dry heat ovens. For this purpose, we offer **CATT**, **DFLT** and **DFSL** label classes that withstand both conditions.



Chemical Exposure

NitroTAG labels are ideal when your cryogenically stored containers require short-term exposure to alcohols. For exposure to harsher chemicals, our patented **DTU-class** labels display excellent resistance to routinely used lab chemicals, detergents, solvents, disinfecting solutions, as well as surface-sanitizing wipes. However, when exposure to harsh solvents for longer periods is necessary, we recommend **Cryo-WrapTAG™** and **DFSL-class** wrap-around labels that self-laminate when wrapped around and over the circumference of a tube, providing the printout with an extra layer of protection against harsh solvents as well as abrasion.



Special Features

Now that the two main criteria have been met, we can look at special features. Apart from container-appropriateness and environmental performance, you may also require specific material features related to convenience or preference, such as transparency, opacity, adhesive, and tamper-evidence.



Adhesives

Labels come with either a removable or permanent adhesive. Though many containers require permanent identification, others, such as bottles and cardboard boxes, may require removable labels. Both will remain firmly attached during cryogenic storage. The permanent labels will be nearly impossible to remove afterwards, while the removable labels can be lifted from the container without leaving a mark.



Blackout (Cover-Up)

Blackout labels have a unique opaque face stock and can be placed over an existing label to efficiently cover up any pre-existing information. They are generally used to re-label or over-label containers and can also be employed to block-out sensitive information. We recommend our thermal-transfer printable **BUC** or our laser printable **LCB** label classes for this purpose.



Transparent

Our **HBCL** and **DFLT** classes of transparent labels ensure the contents of labeled containers remain visible. They are ideal for identifying aliquot tubes and vials as well as containers where the volume needs to be readily evident. We also offer clear labels that will adhere to already frozen surfaces, **AHA** & **LCY** class labels.



Tamper-Evident

LabTAG's line of tamper-evident labels, **Cryo C-KurTAG™**, will tear if there is any attempt to remove them, clearly indicating that the contents of the container have been tampered with.



Destructible

Similar to tamper-evident labels, our **CTDB** destructible label classes will destruct if there is an attempt to tamper with them. However, unlike tamper-evident labels, destructible labels will tear into extremely small pieces, leaving no decipherable printout behind. .



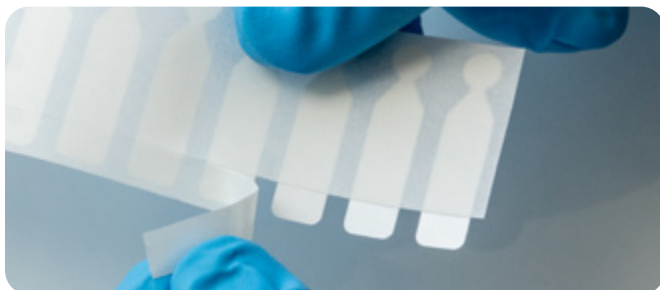
Wrap-Around

Our **wrap-around** labels come with a transparent laminate that provides additional protection against extreme temperatures, exposure to harsh chemicals, as well as abrasion and physical damage. These self-laminating labels ensure that printed information remains legible and barcodes scannable.



Piggyback

Our **PJTIA** class of labels has a unique label-on-label multi-layer design that provides a versatile organization tool. They are composed of one or many smaller labels nestled within a larger adhesive label, making them perfect for record-keeping and tracking of cryogenically stored specimens.



Back Slit

LabTAG also offers a selection of cryogenic labels with a back slit for easy peeling. This feature can be applied to any label and simplifies the process of peeling the label off its liner.



SimPEEL™ (Patent Pending)

SimPEEL™ technology is a unique, innovative design that allows cryo labels to be quickly and easily peeled and applied without ever coming into contact with the label adhesive. We offer **SimPEEL** versions of various label classes, including **NitroTAG** and **CryoSTUCK**. **SimPEEL** can be added to any of our labels upon request.



SnapPEEL™ (Patent Pending)

SnapPEEL™ technology makes identifying cryo vials and microtubes quick and easy. Consisting of a connected circle-and-rectangle, **SnapPEEL** allows both labels to be peeled in a single motion and makes applying the circle labels on the vial cap more precise. Once the circle is attached, the rectangle portion can then be easily snapped off and applied on the side of the vial. Thermal-transfer, direct thermal, and laser **SnapPEEL** labels are currently available, though **SnapPEEL** technology can be added to any of our cryo labels designed for tubes and vials upon request.



RFID

LabTAG offers cryogenic RFID labels that can be read while immersed in liquids, including liquid nitrogen (-196°C). These thermal-transfer RFID labels have a flexible UHF inlay and strong permanent adhesive, ideal for identifying curved vials and tubes stored under deep-freeze and cryogenic conditions. Can be read/scanned at 360° using an RFID reader, without the need to be in direct line-of-sight, eliminating unwanted freeze-thaw cycles. **RFID NitroTAG**, **RFID CryoSTUCK**, and **RFID Cryo-WrapTAG** labels are currently available, though customizable RFID solutions can also be provided upon request.

Printing Methods

At this point, you have identified what containers you are labeling, which environments the labels will be subject to, and which special features you require. It is time to choose your printing method. Depending on the previously selected factors, your options will be limited. Remember, you can't change your criteria, but you can always change your printer! If you do not wish to deal with on-demand label printing yourself, you can always take advantage of our [custom label printing](#) services.



Thermal-Transfer

Thermal-transfer is the gold standard of printing methods as it provides the most versatility and resistance. The technology works by heating a ribbon to transfer ink onto the label. When printing your own labels in-house, using thermal-transfer ribbons made of resin provides the most resistance against harsh solvents (e.g., Xylene and DMSO), cold storage, extreme temperatures, high-pressure sterilization, smudging, and scratching.

These printers use rolls of labels and print using a thermal ribbon in only one color (commonly black). Thermal-transfer printing provides the most options for different label materials, so you're highly likely to find the product you need by sticking with thermal-transfer as your printing method. Moreover, most automated tube and plate labelers use thermal-transfer technology to print their labels.

Direct Thermal

Direct thermal printers use rolls of labels that are coated with a leuco dye, a chemical that changes color when heat from the print head is applied to it. Direct thermal labels **do not** use ribbons, and the printout is only black, not colored. Direct thermal printing does not require a ribbon and provides a hassle-free option when a thermal-transfer printer is not available.

Direct thermal printing is not compatible with sterilization protocols, as the labels turn entirely black when heated, and they are prone to fading over time, especially with exposure to light and chemicals.

DYMO

DYMO is a brand of direct thermal printers that inherit the previously mentioned direct thermal technology properties. DYMO label rolls have special markings that make them compatible with only DYMO printers.

LabTAG has a line of [DYMO-compatible labels](#) for DYMO's 450-series and 4XL LabelWriter printer models. This includes labels that offer unprecedented levels of resistance to heat, chemicals, and frost. DYMO-branded labels for the new generation of LabelWriter 550 printers are now also available that can be applied at room temperature and to already frozen surfaces.

Laser

Laser desktop printers use toner cartridges to produce a smudgeproof, waterproof, UV-resistant, and cryogenic-resistant printout. You can print in color if your laser printer allows it. Laser sheets are available in various sizes, including US Letter (8.5" x 11"), European A4 (210 mm x 297 mm), and Hagaki (4" x 6"). Labels printed

with laser printers are not recommended for chemical exposure unless there is a protective layer on top of the printout, such as the one provided by our DFSL label class.

Inkjet

Inkjet printable labels are available in sheet and roll formats for printing with full-color desktop inkjet printers and full-color roll label printers. These inkjet labels provide resistance to spraying and wiping with alcohols in addition to long-term storage in low temperature lab freezers. [Inkjet cryogenic labels \(-196°C\)](#) and [inkjet deep-freeze labels \(-80°C\)](#) are available through LabTAG.

Flexographic

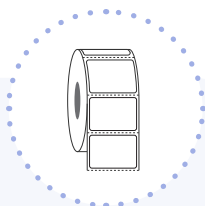
Pre-printed labels can also be provided upon request. These labels can be printed using our [flexographic](#) printing press that uses printing plates to obtain a clear, crisp printout. This allows the use of various ink types and label materials to produce a truly custom solution. This also allows for superior color printing compared to other printing methods.



Formats

There are two basic label formats: sheets and rolls. Our cryogenic labels are available in rolls for thermal-transfer or direct thermal printers and in sheets for laser and inkjet printers.

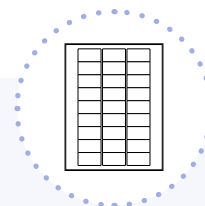
Roll Labels



- Give more flexibility and control over what you're printing
- Greater choice of label types and configurations
- Free label design software is available
- Great for small or large batches of variable data
- Great for long-term projects or daily workflows

Note: Roll labels require a dedicated thermal label printer. When printing in thermal-transfer mode, a matching ink ribbon is required.

Sheet Labels



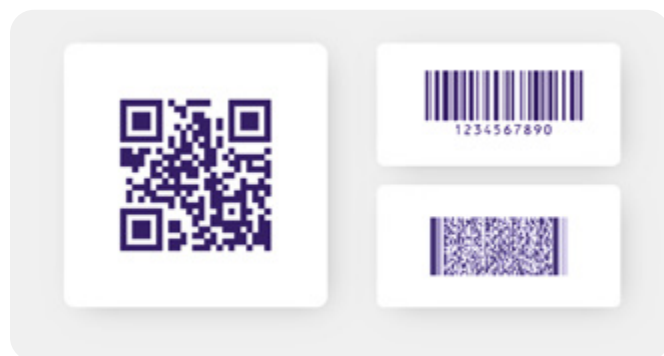
- Print with regular office desktop laser or inkjet printers
- Ideal for printing large batches of identical information
- Rows and columns are useful for labeling batches with variable or identical information
- Easy to use, free label templates with MS Word
- Great for one-time projects

Note: Constantly feeding sheets into the printer can become a burden. Sheets can be impractical when printing a single label. Always factor in the cost of ink cartridges.

	Thermal-Transfer	Direct Thermal	DYMO-Compatible	Flexography	Inkjet	Laser
Format	Roll	Roll	Roll	Roll	Roll/Sheet	Sheet
Printout Colors Available	Black, white, red, or blue	Black	Black	Full Color	Full Color	Full Color
High Throughput Variable Data Printing	Best	Best	Better	Not Ideal	Good	Good
Smudge-proof	Best	Good	Good	Best	Good	Good
Fade-proof	Best	Not Ideal	Not Ideal	Best	Better	Better
Alcohol Resistant	Best	Not Ideal	Good	Better	Good	Better
Resistant to 10% DMSO	Best	Not Ideal	Good	Best	Better	Better
Water Resistant	Best	Better	Good	Best	Good	Best
Autoclave Resistant	Best	Not Ideal	Not Ideal	Best	Better	Better

Data

Best practices state that a label should display human-readable data alongside a scannable code. Common elements displayed on a label are a unique identifier, batch number, date, and company logo. Scannable barcodes and RFID chips both offer great ways of tracking samples and managing inventory. Each has its own unique advantages.



1D & 2D Barcodes

- Low start-up cost
- Printable using any printer
- Scanners are inexpensive
- Scannable with smartphone applications
- Scan one barcode at a time, no mix-ups
- Adaptable to a large variety of applications



Radio Frequency Identification (RFID)

- RFID printer and reader required
- Tags can be scanned and read from a distance with minimal line of sight
- Remain readable even if the label is defaced
- Scan multiple tags simultaneously
- Monitor many assets consistently
- Tags can be re-encoded
- Higher data storage capacity
- Increased security
- Face stock can be printed with barcodes

Note that most RFID labels function well at -80°C but are not recommended for storage in liquid nitrogen.

Integration

To achieve optimal integration, your cryogenic labels, printers, scanners, and printing software must work in harmony with your existing protocols and lab management software, like laboratory information management systems (LIMS) and electronic lab notebooks (ELNs).

Printers

Our labels work with most brands of printers. The printer you choose should fit seamlessly into your lab's workflow alongside all other components. For laboratories that process high volumes of samples or depend on lab informatics software, like a LIMS, having a dedicated label printer (e.g., thermal-transfer) rather than a desktop printer is necessary to ensure workflow isn't compromised. **Thermal-transfer barcode printers** and **RFID printers** are available through LabTAG.



Automation

LabTAG has partnered with automated labeling systems, such as **Scinomix** and **HTI** to provide cryogenic labels tailored for automated tube and plate print-and-apply systems, perfect for high volumes of labeling. **Contact us** for more information.



Label Software

Label software can be categorized as label design software or informatics software.

Label design software can offer a range of basic and advanced features, allowing you to design, create, automate, and manage labels. You can connect databases to your templates, encrypt documents, generate serial numbers and variable data, design 1D and 2D barcodes, encode RFID tags, and much more. LabTAG offers two popular options, **BarTender™** and **ZebraDesigner Professional 3**, and can support other options, such as **Label Live**, which is currently offered in a **Cody-3 printing kit**.

Informatics software like laboratory information management systems, inventory management systems, and electronic witnessing systems handle patient and sample information. This software might include a label printing portion. If not, they can integrate with a label design software. We partner with several **informatics software providers** to have seamless integration with our labeling solutions.



Label LIVE



BarTender.

Scanners & Readers

Scanners & RFID Readers are available with different options and additional features. Handheld scanners are portable, emitting a scanning light at the push of a button, while stationary scanners require the container to be held directly under or above the scanner to register the barcode. Handheld scanners can work online or offline, either by sending data to a computer or storing data in the scanner itself before downloading the information to another system. These scanners can also be wireless or wired, depending on how much flexibility you require when scanning. Mobile app scanners can also be implemented, depending on the tracking method used (e.g., 2D barcodes can often be scanned with mobile apps).



Why Choose LabTAG

We became a worldwide leader in laboratory identification solutions thanks to our R&D and technical support team, which comprises scientists who understand the importance of being error-free, efficient, and innovative in the lab. By prioritizing personalized customer service, we are able to deliver tailored solutions on a deeper level and in record time. Being a manufacturer and a retailer allows us to have complete control over the entire development, production, delivery, and support of our products

As an ISO-certified company, we implement stringent protocols to ensure we uphold high standards of quality in our products and services. We also offer free samples so that you can try our labels before buying to confirm that they will work seamlessly with your application's conditions.

With the widest selection of cryogenic labels available on the market, we will find the right solution for your stringent requirements. Our experts are always ready to assist you in product selection, solution development, and technical support. Give us a call or email today, and we will set you up with everything.

Need Lab Labels? Think LabTAG.



Dedication to Quality

Rigorously tested high-grade materials and high-quality products



Business Continuity

Mitigated risk of service interruption from unexpected disruptions or disasters.



Scientific Label Experts

Deep understanding of industry-specific identification requirements.



Two Decades of Business

Continuously scaling, improving, serving, and delighting, with our customers in mind.



Product Innovation

In-house R&D team continuously innovates and creates unique, patented products.



Tailor-Made Solutions

Helping you realize your multifaceted projects with custom labels and creative solutions.



Worldwide Distribution

Strategically located warehouses reduce friction for international shipments.



Fast Order Fulfillment

Daytime and evening crews ensure short lead times so you can meet your project deadlines.



Satisfaction Guarantee

Easy returns and exchanges if total satisfaction is not met.



Free Samples

Generous, free sample service allows you to try products before purchasing.



ISO 9001:2015 Certified

We are committed to providing reliable products and services that meet customer and regulatory requirements, through our quality management system.

ISO 22301:2012 Compliant

Our ISO 22301:2012 business continuity management system allows us to prepare for and reduce the likelihood of unexpected disruptions so that we may continue to serve our clients.



Experts ready to help



LabTAG provides excellent, personalized customer service and technical support – before, during, and after your purchase. We are with you every step of the way to help you achieve your labeling goals. Our highly educated experts will assist you throughout the label selection process, ensure you get your labels on time, and help you troubleshoot any issues that may arise. This service is free for all our customers.

Shop Online at **Labtag.com**

- Discover a large selection of labels in many sizes and colors
- Find the right product by using our intuitive label finder tool
 - Place your purchase orders (P.O.) online
- Use our live chat to get help from our support team



INTERNATIONAL

+1-450-973-9420

cx@ga-international.com

Labtag.com

USA

LabTAG Inc.

42 Gateway Drive, Suite 400
Plattsburgh,
New York 12901, USA

1-800-518-0364

CANADA

GA International Inc.

4455 Rue Louis-B.-Mayer Laval,
Quebec H7P 6B5
Canada

1-800-518-0364

NETHERLANDS

GA International Inc.

Runweg 28A,
5258 BN Berlicum
Netherlands

+31 (0) 73-7370185

UK

TAG Scientific Ltd.

Preston Park House, South Road
Brighton, East Sussex
BN1 6SB, United Kingdom

+44 (20) 3769 5683