



Thermo Scientific Barcoding Services

Improve productivity with flawless barcoding services for laboratory samples



Rely on our tracking and retrieval expertise.

Researchers have been relying on Thermo Scientific sample storage products and services for well over a decade. Our barcoding services were developed not only to help customers store their laboratory samples securely, but also to track and retrieve them efficiently. Whether you need simple support for a small laboratory or a very customized service for a high-throughput research facility, we can support your needs.

Ensure accuracy and uptime

One duplicate barcode number, missing label or unreadable code can create havoc in your laboratory. Thermo Scientific barcoding services eliminate the headaches caused by unidentifiable samples, unexpected downtime and missed deadlines.

Select the cost-effective alternative

Establishing in-house barcoding systems can be time-consuming. Most laboratories underestimate costs and time needed to maintain equipment, apply labels and avoid duplicate labels. Thermo Scientific barcoding services are an attractive, cost-effective option.

Benefit from fast turnaround, no-minimum orders

Take advantage of our non-custom service offering whether your laboratory stores thousands of samples or just a few. Deliveries are quick regardless of order size.

Choose the ideal level of customization

Flexible Thermo Scientific custom barcoding services meet a variety of needs. Our barcode experts are available for consultation, making the barcode configuration process quick and simple.

Barcoding Services Specifications

Stock Label Dimensions	63.5 mm x 3.6 mm; 63.5 mm x 6.35 mm; 63.5 mm x 10 mm
Color Blocks Available*	Red, Orange, Yellow, Green, Blue, Violet, Brown or Gray
Codes Available	Code 39, Interleaved 2 of 5, Code 128 Subset A, B or C; others available on request
Label and Code Placement	Choose label location, human readable placement, leading/trailing quiet zones
Label Material	White Polypropylene
Premium Label Laminate Material	Polyester Matte or Clear (available in 63.5 mm x 6.35 mm size only)
Adhesive	Permanent Acrylic
Chemical Resistance	DMSO, Methylene Chloride, Methanol, Ethyl Acetate, Ethanol, Organic Solvents
Temperature Resistance	-80 °C** to +90 °C; 95% Humidity at 37 °C; Autoclavable
Radiation Resistance	Up to 40 kGy
Other Custom and Premium Options	Specialized Packaging, 100% Jobs, Used/Unused Files, Data Files

* Available as 63.5 mm x 6.35 mm premium labels with laminate only

** Labels for storage down to -180 °C (vapor phase of liquid nitrogen) are available as a special order





With Thermo Scientific Barcode Services, you'll benefit from:

Exceptional Quality

- Secure sample tracking for virtually all Thermo Scientific Matrix microplates, deep well blocks and storage tube racks.*
- 100% read verification of every barcode ensures readable labels that meet ANSI standards.
- Machine vision inspection of every piece of barcoded labware ensures the correct labware is used and that labels are positioned on the proper side(s) of plates.
- Barcoded plates are certified free of DNA, DNase, RNase, endotoxins and cytotoxins.

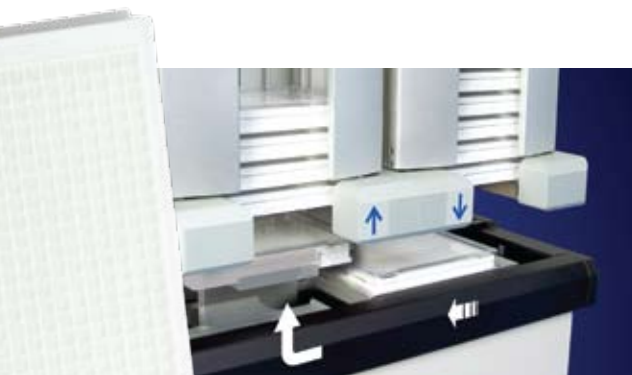
Speed and Efficiency

- Dedicated order coordinators ensure efficient order processing, and barcode experts are available for consultation.
- Smaller experiments can be managed quickly since no minimum orders are required for the non-custom option.
- Automated systems can be loaded quickly, and uptime can be improved via sequential packaging in easy-to-open, quick-tear bags.

Accuracy and Enhanced Security

- Database control of barcode processing steps ensures numbers can be provided quickly and electronically.
- Previously ordered sequences will not be duplicated because we track every barcode number ever produced.

*Thermo Scientific Abgene storage tube racks are available with the non-custom barcoding option.



Turn to the back for
service definitions and
ordering information



Barcoding Services Definitions

ANSI: The American National Standards Institute, a private organization that develops manufacturing standards for various applications, including barcodes.

Barcode: A linear (or 1D) barcode is an optical, machine-readable representation of data in widths (or lines) and spacings of parallel lines. Each line or space represents a letter or number.

Barcode Types:

- **Code 128:** A check digit is integrated into the barcode, making it a secure and popular choice. (An additional check digit can be added). Characters are represented by three bars and three spaces. The term “128” is derived from the ability to encode the full ASCII 128 character set. Code 128 A uses all standard keyboard characters (numbers, letters and symbols) plus additional control characters and special characters. Code 128 B uses all standard keyboard characters plus lower-case letters and special characters. Code 128 C uses digit pairs from 00 through 99.
- **Code 39:** Uses numbers (0-9), letters (A-Z) as well as symbols (e.g. + % / \$). The term “39” was coined because each character is represented by 9 bars and spaces, 3 of which are always wide.
- **Interleaved 2 of 5:** Uses numbers (0-9) only. Each character is represented by five bars and spaces, two of which are wide. In each pair of numbers, the first is encoded within the bars and the second within the spaces.

Check Digit: Mathematical total all of the letters and numbers in the barcode (also called a check sum or check character). The check digit is placed at the end of the barcode, but before the Trailing Quiet Zone to allow the barcode reader to check for read errors.

Color Block: Colored area on the barcode label that allows plate identification by color. It can be used to differentiate between different experiments, protocols, etc.

Data File: A text file that shows the linear code on the side of the rack, the well placement of the tube and the 2D code on the tube. This is a premium service at additional costs.

Human Readable Code: The letters and numbers that make up the barcode, but written out so that a person can read them.

Quiet Zone: Blank area before (“leading quiet zone”) or after (“trailing quiet zone”) a barcode that contains no markings. This area must be at least 10 times the width of the narrowest bar so that the reader recognizes the “start” and “stop” of each barcode.

Used/Unused File: A text file that can be supplied so that you know which codes were used on your plates and which were discarded or not needed.

100% Job: During our quality control process, we may find codes that are unreadable and will discard them. For this reason, we typically request 15% more numbers than you require in your barcode sequence. If you require no missing codes, you can request a 100% job in which no barcodes will be dropped. This is a premium service at additional costs.



To place your first barcode order, or to learn more, please contact your sales representative.