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Gibco™

Trypan Blue Solution, 0.4%

Trypan Blue Solution, 0.4%, is routinely used as a cell stain to assess cell viability using the dye exclusion [Read more](#)

Have Questions? [Contact Us](#)

Catalog Number	Quantity
15250061	100 mL

Catalog number 15250061	
Price (MDL)	



Trypan Blue Solution, 0.4%, is routinely used as a cell stain to assess cell viability using the dye exclusion test. This test is often performed while counting cells with the hemocytometer during routine subculturing, but can be performed any time cell viability needs to be determined quickly and accurately. The dye exclusion test is based upon the concept that viable cells do not take up impermeable dyes (like Trypan Blue), but dead cells are permeable and take up the dye.

cGMP manufacturing and quality system

Trypan Blue Solution is manufactured at a cGMP-compliant facility located in Grand Island, New York. The facility is registered with the FDA as a medical device manufacturer and is certified to ISO 13485 standards.

For Research Use Only. Not for use in diagnostic procedures.

Specifications

Cell Type	Mammalian Cells
Color	Blue
Concentration	0.004
Detection Method	Colorimetric
For Use With (Application)	Cell Counting
Quantity	100 mL
Shelf Life	36 Months
Shipping Condition	Room Temperature
Form	Liquid
Product Type	Trypan Blue
Sterility	Sterile-filtered
Unit Size	Each

Contents & Storage

Storage conditions: 15 – 30°C

Shipping conditions: Ambient

Shelf life: 36 months from date of manufacture



[Explore all Gibco Cell Culture Reagents, designed to deliver reproducibility >](#)

Have questions about this product? Ask our AI assisted search.

Prior to staining with trypan blue solution, do the cells need to be washed to remove the culture medium?

How does trypan blue solution stain viable cells?

Can trypan blue solution be used to differentiate between apoptotic and necrotic cells?


Can I combine trypan blue staining with fluorescence staining?

What causes trypan blue to form a precipitate?

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Frequently asked questions (FAQs)

How do I quench any fluorescence outside of my live cells and leave my intracellular staining intact? 

How is Gibco Trypan Blue Solution, 0.4% (Cat. No. 15250061) sterilized? 

What is Trypan Blue Solution, 0.4% dissolved in? 

How long can cells be exposed to trypan blue before all cells are stained with the dye? 

Documents & Downloads

Certificates

Lot #	Certificate Type	Date	Catalog Number(s)
3321400	Certificate of Analysis	Dec 25, 2025	15250061
3321398	Certificate of Analysis	Nov 27, 2025	15250061
3222302	Certificate of Analysis	Nov 01, 2025	15250061
3203967	Certificate of Analysis	Sep 27, 2025	15250061
3203965	Certificate of Analysis	Sep 24, 2025	15250061

5 results displayed, search above for a specific certificate

[Request a Certificate](#)

Safety Data Sheets



Scientific Resources


Reference Materials



[Switch-to-Gibco Products Cross Reference Tool - Find a Gibco product replacement for your current cell culture reagent](#)

[Cell Culture Select Tool - Search your cell line of interest to find product recommendations and resources](#)


Application Notes

 [Application Note: Panel Design and Analysis of Natural Killer Cell Populations Using Spectral Unmixing on the Attune Xenith Flow Cytometer](#)

Flyers


 [Flyer: Nunclon Supra surfaces for xeno-free hMSC culture](#)

Technical Notes

 [Technical Note: Maximizing Accuracy of Immunophenotyping Using Spectral Unmixing with the Attune Xenith Flow Cytometer: Essential Strategies for Optimizing Sample Quality and Acquisition Stability](#)

Citations & References (3)


Citations & References

[Protocol to generate human liver spheroids to study liver fibrosis induced by metabolic stress.](#) 

Authors: Kim HY, Lee W, Liu X, Jang H, Sakane S, Carvalho-Gontijo Weber R, Diggle K, Kerk SA, Metallo CM, Kisseleva T, Brenner DA

Journal: STAR protocols

PubMed ID: 38833372

[Bax and Bak independently promote cytochrome C release from mitochondria.](#) 

Authors: Degenhardt Kurt; Sundararajan Ramya; Lindsten Tullia; Thompson Craig; White Eileen;

Journal: J Biol Chem

PubMed ID: 11836241

Abstract

Currently, there is no effective treatment for obesity and alcohol-associated liver diseases, partially due to the lack of translational human models. Here, we present a protocol to generate 3D human liver spheroids that contain all the liver cell types and mimic [âlivers in a dish.](#)[â](#) We describe strategies to induce ... [More](#)

'Pro-apoptotic Bax and Bak have been implicated in the regulation of p53-dependent apoptosis. We assessed the ability of primary baby mouse kidney (BMK) epithelial cells from [bax\(-/-\)](#), [bak\(-/-\)](#), and [bax\(-/-\) bak\(-/-\)](#) mice to be transformed by E1A alone or in conjunction with dominant-negative p53 (p53DD). Although E1A alone transformed BMK ... [More](#)

Authors: Esumi Hiroyasu; Izuishi Kunihiro; Kato Kazuyoshi; Hashimoto Koichi; Kurashima Yukiko; Kishimoto Atsuhiko; Ogura Tsutomu; Ozawa Takayuki;

Journal: J Biol Chem

PubMed ID: 12091379

maintaining cellular energy by increasing glycolysis and inhibiting anabolic pathways. Stimulation of glycolysis has been regarded as the main response that increases energy production during hypoxia; ... [More](#)