



# **Trypan Blue**

## **Product Description**

Name :	Trypan Blue, Sodium salt,
	Ultra Pure Grade
	Purified to eliminate fluorescent impurities
<b>Catalog Number :</b>	FP-JQ9110, 10g
Molecular Weight :	MW= 960.81
Solubility:	Water
Absorption :	607 nm



**Storage:** Store at room temperature. Expiration date is 6 months from the date of receipt.

## Introduction

Trypan blue, a diazo dye is a vital stain that colors dead tissues or cells blue. Live cells or tissues with intact cell membranes are not be colored. Since cells are very selective in the compounds that pass through the membrane, in a viable cell trypan blue is not absorbed; however, it traverses the membrane in a dead cell. Hence, dead cells are shown as a distinctive blue color under a microscope. Trypan blue is commonly used in microscopy (for cell counting) and in laboratory mice for assessment of tissue viability. The method cannot distinguish between necrotic and apoptotic cells. It is also useful to observe hyphea of fungi and Stramenopiles. We offer the highest purity of Trypan Blue.

### **Directions for use**

#### **Guidelines for use**

Trypan UltraBlue<sup>™</sup>, Trypan Purple<sup>™</sup>, and Trypan Red Plus<sup>™</sup> are similar to Trypan Blue in cell permeability. It is not permeable to live cells. Compared to Trypan Blue, these new trypan compounds areless toxic to cells. In particular, they have minimal effect on cell surface receptors such as G-protein coupled receptors (GPCRs). Another advantage is that the cells can be clearly observed under microscope when Trypan Red Plus<sup>™</sup> is used while Trypan Blue makes it quite difficult to see cells under microscope.

Our Trypan UltraBlue<sup>™</sup>, Trypan Purple<sup>™</sup>, Trypan Red Plus<sup>™</sup> and Trypan UltraRed<sup>™</sup> can also be used to prevent florescent dyes (such as FDA, rhodamine 123, JC-1, TMRA, TMRM, Indo-1 AM, Fura-2 AM, calcein AM, Fluo-3 AM, Fluo-4 AM and Fluo-8 AM) from leaking out of cells. They might inhibit the activities of drug-efflux pumps since they contain a probenecid-like moiety as shown below. Compared to probenecid, they

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Hotline +33:4 70 03 73 06 • interbiotech@interchim.com FT-JQ9100 are neutral, highly soluble in water, and convenient to use. Their cellular mechanisms are still under investigation.



Figure 1. The structure of Trypan Red Plus<sup>™</sup> (WSH = water-soluble head; PLM = probenecid-like moiety)

Our Trypan Purple<sup>TM</sup>, and Trypan Red Plus<sup>TM</sup> are highly purified, and can be used up to 1mM with minimal cell cytotoxicity. A certain volume of our concentrated Trypan UltraBlue<sup>TM</sup>, Trypan Purple<sup>TM</sup>, and Trypan Red Plus<sup>TM</sup> solutions can be added into the assay system to have the final concentrations of Trypan UltraBlue<sup>TM</sup>, Trypan Purple<sup>TM</sup>, and Trypan Red Plus<sup>TM</sup> ranging from 0.1 to 1.0mM depending on the cell lines used. The recommended concentrations are from 0.25 to 0.75 mM.

# **Technical and scientific information**

#### **Related products**

- Trypan UltraBlue, JQ9121
- Trypan Red Plus, CL1090

- Trypan Purple, RK5210
- Trypan Blue, Cell Culture Tested, JQ9100

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# **Ordering information**

Catalog size quantities and prices may be found at <u>http://www.interchim.com</u>. Please inquire for higher quantities (availability, shipment conditions).

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