

## True-Nuclear™ Transcription Factor Buffer Set

<b>Catalog# / Size</b>	424401 / 120 tests
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	Transcription Factor Fixation/Permeabilization Buffer Set
<b>Description</b>	BioLegend's True-Nuclear™ Transcription Factor Buffer Set has been specially formulated for intracellular staining with minimum effect on the surface fluorochrome staining.  See the advantages of True-Nuclear™ Transcription Factor Buffer Set in this brief webinar: <a href="https://biolegend.com/true_nuclear_webinar">biolegend.com/true_nuclear_webinar</a> .

**Caution:** The True-Nuclear™ Transcription Factor Buffer Set contains paraformaldehyde, which is toxic and mutagenic. Please handle with caution. Wear gloves, lab coats, and necessary protection to avoid direct contact.

### Product Details

---

<b>Storage &amp; Handling</b>	Store between 2°C and 8°C. <b>Do not freeze.</b>
<b>Application</b>	<a href="#">ICFC - Quality tested</a>
<b>Recommended Usage</b>	Prepare fresh Transcription Factor Fix working solution by diluting the 4X Fix Concentrate (1 part) with the Fix Diluent (3 parts). 1 mL of the 1X Fix working solution is needed for each tube.  Prepare a 1X working solution of the Perm Buffer by diluting the 10X Perm Buffer with distilled water. 6.5 mL of 1X Perm Buffer is needed for each sample of tube.  NOTE: The 10X Perm Buffer may have crystallization or precipitation when it is stored at 2-8°C; however, this is normal and does not affect the buffer's performance. If there is a heavy precipitation observed after dilution to 1X working solution, it can be filtered to clarify the solution.
<b>Application Notes</b>	<b>Buffer Set Contents:</b> <ul style="list-style-type: none"><li>• True-Nuclear™ 4X Fix Concentrate (30 mL)</li><li>• True-Nuclear™ Fix Diluent (100 mL)</li><li>• True-Nuclear™ 10X Perm Buffer (100 mL)</li></ul>
<b>Additional Product Notes</b>	View more applications data using this product to <a href="#">stain Veri-Cells™ lyophilized control cells</a> , to <a href="#">detect transcription factors</a> , and <a href="#">to study TIGIT</a> in our Scientific Poster Library.

<b>Product Citations</b>	<ol style="list-style-type: none"><li>1. Wang L, <i>et al.</i> 2019. Front Pharmacol. 1.342361111. <a href="#">PubMed</a></li><li>2. Ogawa T, <i>et al.</i> 2020. J Immunol. 205:907. <a href="#">PubMed</a></li><li>3. Ajith A, <i>et al.</i> 2021. Front Immunol. 12:687715. <a href="#">PubMed</a></li><li>4. Manso BA, <i>et al.</i> 2021. STAR Protoc. 2:100485. <a href="#">PubMed</a></li><li>5. Wu HJ, <i>et al.</i> 2021. Nat Commun. 12:4897. <a href="#">PubMed</a></li><li>6. Zeng N, <i>et al.</i> 2022. EMBO Rep. 23:e53302. <a href="#">PubMed</a></li><li>7. Li X, <i>et al.</i> 2022. Nat Commun. 13:2794. <a href="#">PubMed</a></li><li>8. Otano I, <i>et al.</i> 2021. Nat Commun. 12:7296. <a href="#">PubMed</a></li><li>9. Bujanover N, <i>et al.</i> 2021. Stem Cell Reports. 16:1884. <a href="#">PubMed</a></li><li>10. Kim D, <i>et al.</i> 2021. Nanomicro Lett. 13:31. <a href="#">PubMed</a></li><li>11. Zhang M, <i>et al.</i> 2020. Nat Commun. 4.707638889. <a href="#">PubMed</a></li><li>12. Baram T, <i>et al.</i> 2021. Cells. 10:. <a href="#">PubMed</a></li></ol>
--------------------------	---

### Antigen Details

---

<b>Cell Type</b>	Tregs
<b>Biology Area</b>	Immunology, Transcription Factors

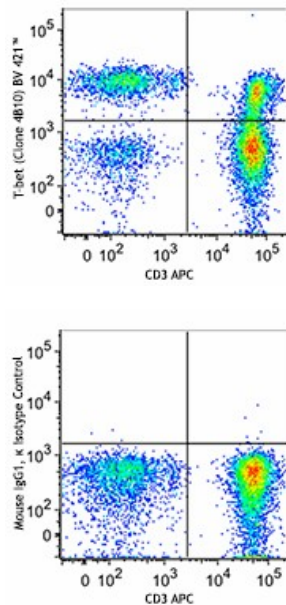
<b>Molecular Family</b>	Nuclear Markers
<b>Gene ID</b>	NA

## Related Protocols

[True-Nuclear™ Transcription Factor Staining Protocol for 96-Well U Bottom Plate](#)

[True-Nuclear™ Transcription Factor Staining Protocol for 5mL Tubes](#)

## Product Data



Human peripheral blood lymphocytes were surface stained with CD3 APC and then treated with True-Nuclear™ Transcription Factor Buffer Set. Cells were then stained with T-bet (clone 4B10) Brilliant Violet 421™ (top) or mouse IgG1, κ Brilliant Violet 421™ isotype control (bottom).

For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.

\*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, [www.biolegend.com/ordering#license](http://www.biolegend.com/ordering#license)). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

8999 BioLegend Way, San Diego, CA 92121 [www.biolegend.com](http://www.biolegend.com)  
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587