

Datasheet for MB-008-4000**10X PBS pH 7.2****Overview**

Description:	10X PBS pH 7.2 (0.2 M Potassium Phosphate 1.5 M Sodium Chloride) (4 x 1 liter) - MB-008-4000
Item No.:	MB-008-4000
Size:	4 x 1 L
Applications:	ELISA, FC, IF, Other

Product Details

Background:	Phosphate buffered saline is suitable for multiple applications including biological diluent buffer for antibodies or other biologics. Also may be used as a wash buffer for immunological assays including western blot, immunohistochemistry, immunofluorescence microscopy, and ELISA. Other applications may require detergents or other additional components.
Synonyms:	Phosphate buffered saline, Phosphate buffered solution, PBS, 10X PBS

Target Details

Purity/Specificity:	10X PBS buffer was aseptically filtered through a Millipore 0.22 micron filter into clean, pre-sterilized containers. The product was tested on trypticase soy agar for 24 hours, 48 hours and 72 hours and was found to be negative for bacteria.
Relevant Links:	MB-008 SDS

Application Details

Suggested Applications:	ELISA, FC, IF, Other (Based on references)
Application Note:	This product is a concentrated stock solution and should be diluted appropriately with distilled, deionized water or equivalent to its final working concentration. 10X Phosphate Buffered Saline (PBS) consists of 0.2 M Potassium Phosphate, 1.5 M Sodium Chloride, pH 7.2 prepared in highly polished pharmaceutical grade water (WFI).
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

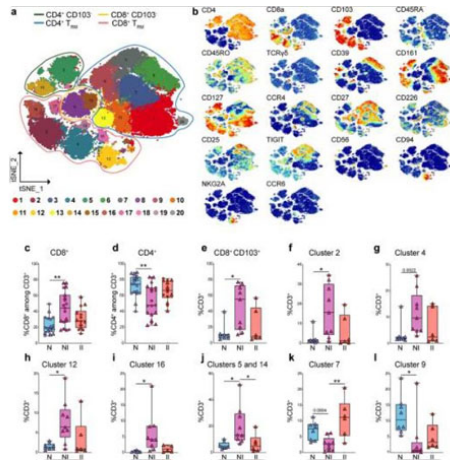
Formulation

Physical State:	Liquid
Concentration:	10 X
Buffer:	See application note.
Preservative:	None
Stabilizer:	None

Shipping & Handling

Shipping Condition:	Ambient
Storage Condition:	Store container at room temperature (18° to 26° C) prior to opening. If desired, the solution may be stored at 4° C or less. Some salts may precipitate out of solution at lower temperature. Allow buffer to equilibrate to room temperature (18° to 26° C) to restore solubility of some salts.
Expiration:	Expiration date is six (6) months from date of receipt.

Images



Flow Cytometry

Quantification of CD8 and CD4 T cell clusters by CyTOF analysis in LP of control and CD patients. a Schematic t-SNE of CD4+ and CD8+ T cells from LP of all donors concatenated together (n = 18) controls (N), n = 8; CD, non-inflamed site (NI), n = 9; CD, inflamed site (II), n = 6. Total of 23 samples. b t-SNE of the indicated markers in CD4+ and CD8+ T cells. c, d Quantification of total CD8+ (c), total CD4+ (d) in LP of controls and CD patients by CyTOF (triangles = fresh samples) and FACS (circles = frozen samples). c, d Control (N), n = 17 (8 fresh, 9 frozen); CD, non-inflamed site (NI), n = 19 (9 fresh, 10 frozen); CD, inflamed site (II), n = 14 (6 fresh, 8 frozen). e-i Quantification of total CD8+ TRM (e) and CD8+ clusters 2 (f), 4 (g), 12 (h), and 16 (i) in LP of controls and CD patients by CyTOF. j-l Quantification of the CD4+ clusters 5 and 14 (j), 7 (k), and 9 (l) in LP of controls and CD patients by CyTOF. e-l Controls (N), n = 8; CD, non-inflamed site (NI), n = 9; CD, inflamed site (II), n = 6. Circles and triangles on the boxplots show data collected for each individual donor. Data were median and interquartile range. Significance was calculated using an ordinary, one-way ANOVA, multiple comparisons test with Prism v8 software. c **P = 0.0014; d **P = 0.028; e *P = 0.0139; f *P = 0.0178; h *P = 0.0178; i *P = 0.0219; j N vs. NI *P = 0.0156, NI vs. II *P = 0.0465; k **P = 0.0014; l **P = 0.0283. TRM tissue-resident memory T cell. Fig. 6. PMID: 33771991.

Bottle

10X PBS pH 7.2 (0.2 M Potassium Phosphate 1.5 M Sodium Chloride)



References

- Kowli S et al. Characterization of immune phenotypes in peripheral blood of adult renal transplant recipients using mass cytometry (CyTOF). *Immunohorizons*. (2025)
- Patel SP et al. Phase II basket trial of Dual Anti-CTLA-4 and anti-PD-1 blockade in Rare Tumors (DART) SWOG S1609: pancreatic neuroendocrine neoplasm (PNEN) cohort. *J Immunother Cancer*. (2025)
- Zhang R et al. Biofilm Formation in Clinical Isolates of *Fusarium*. *J Fungi (Basel)*. (2024)
- Sanz M et al. Aminobisphosphonates reactivate the latent reservoir in people living with HIV-1. *Front Immunol*. (2023)
- Galbraith MD et al. Multidimensional definition of the interferonopathy of Down syndrome and its response to JAK inhibition. *Sci Adv*. (2023)
- Gihring A et al. Influence of bariatric surgery on the peripheral blood immune system of female patients with morbid obesity revealed by high-dimensional mass cytometry. *Front Immunol*. (2023)
- Mohamad SF et al. Utilizing CyTOF to Examine Hematopoietic Stem and Progenitor Phenotype. *Methods Mol Biol*. (2023)
- Sperber HS et al. The hypoxia-regulated ectonucleotidase CD73 is a host determinant of HIV latency. *Cell Rep*. (2023)
- Lança T et al. IRF8 deficiency induces the transcriptional, functional, and epigenetic reprogramming of cDC1 into the cDC2 lineage. *Immunity*. (2022)
- Agosto-Burgos C et al. The frequency of Treg subsets distinguishes disease activity in ANCA vasculitis. *Clin Transl Immunology*. (2022)
- Su C et al. 3D chromatin maps of the human pancreas reveal lineage-specific regulatory architecture of T2D risk. *Cell Metab*. (2022)
- Henrick BM et al. Bifidobacteria-mediated immune system imprinting early in life. *Cell*. (2021)
- Xie G et al. Characterization of HIV-induced remodeling reveals differences in infection susceptibility of memory CD4+ T cell subsets in vivo. *Cell Rep*. (2021)
- Sahaf, B et al. Immune Profiling Mass Cytometry Assay Harmonization: Multicenter Experience from CIMAC-CIDC. *Clinical Cancer Research : An Official Journal of the American Association for Cancer Research* (2021)
- Jaeger N et al. Single-cell analyses of Crohn's disease tissues reveal intestinal intraepithelial T cells heterogeneity and altered subset distributions. *Nat Commun*. (2021)
- Neidleman J et al. Distinctive features of SARS-CoV-2-specific T cells predict recovery from severe COVID-19. *medRxiv*. (2021)
- Vasudevan S et al. Lower PDL1, PDL2, and AXL Expression on Lung Myeloid Cells Suggests Inflammatory Bias in Smoking and Chronic Obstructive Pulmonary Disease. *Am J Respir Cell Mol Biol*. (2020)
- Lakshmikanth T et al. Human immune system variation during 1 year. *Cell Rep*. (2020)
- Sahaf B et al. High-parameter immune profiling with CyTOF. *Methods Mol Biol*. (2020)
- Colomb F et al. Sialyl-LewisX Glycoantigen Is Enriched on Cells with Persistent HIV Transcription during Therapy. *Cell Rep*. (2020)
- Vendrame E et al. Profiling of the Human Natural Killer Cell Receptor-Ligand Repertoire. *J Vis Exp*. (2020)
- Fenton TM et al. Immune profiling of human gut-associated lymphoid tissue identifies a role for isolated lymphoid follicles in priming of region-specific immunity. *Immunity*. (2020)

- Rodriguez L et al. Systems-Level Immunomonitoring from Acute to Recovery Phase of Severe COVID-19 *Cell Rep Med.* (2020)
- Neidleman J et al. SARS-CoV-2-specific T cells exhibit phenotypic features of helper function, lack of terminal differentiation, and high proliferation potential. *Cell Rep Med.* (2020)
- Waugh KA et al. Mass cytometry reveals global immune remodeling with multi-lineage hypersensitivity to type I interferon in Down syndrome. *Cell Rep.* (2019)
- Cella M et al. Subsets of ILC3-ILC1-like cells generate a diversity spectrum of innate lymphoid cells in human mucosal tissues. *Nat Immunol.* (2019)
- Collins PL et al. Gene regulatory programs conferring phenotypic identities to human NK cells. *Cell.* (2019)
- Cella, M et al. Subsets of ILC3-ILC1-like cells generate a diversity spectrum of innate lymphoid cells in human mucosal tissues. *Nature Immunology* (2019)
- Leipold MD et al. Comparison of CyTOF assays across sites: Results of a six-center pilot study. *J Immunol Methods.* (2018)
- Olin A et al. Stereotypic immune system development in newborn children. *Cell.* (2018)
- Subrahmanyam PB et al. Cytof measurement of immunocompetence across major immune cell types. *Curr Protoc Cytom.* (2017)
- Leipold MD et al. Phenotyping of live human PBMC using CyTOFTM mass cytometry. *Bio Protoc.* (2015)
- Lin D et al. Intracellular cytokine staining on PBMCs Using CyTOF™ mass cytometry. *Bio Protoc.* (2015)
- Fernandez R et al. Cytokine-stimulated phosphoflow of PBMC using CyTOF mass cytometry. *Bio Protoc.* (2015)
- Fernandez, R et al. Cytokine-Stimulated Phosphoflow of Whole Blood Using CyTOF Mass Cytometry. *Bio-Protocol* (2015)
- JENNIFER BERGER GENE EXPRESSION PATTERNS OF GAMMAHERPESVIRUSES. *Olaf College* (2012)

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.