Product Datasheet

CL-01 Cell Line
NBP1-49595

Unit Size: 1.5 ml

Store in gas phase of liquid nitrogen.

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Publications: 3

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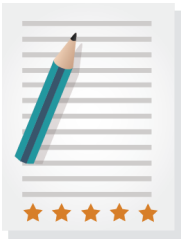

NBP1-49595

CL-01 Cell Line

Product Information

Unit Size	1.5 ml
Concentration	Please see the protocols for proper use of this product. If no protocol is available, contact technical services for assistance.
Storage	Store in gas phase of liquid nitrogen.
Buffer	Approximately 3x10 ^ 6 cells in 1.5ml of freezing media and 10% DMSO.

Product Description

Notes	This cell line is a human B cell line with IgM+ IgD+ on the surface. However, this is also EBV transformed, so the cells can activate each other easily by cell-cell contact. The cells will not be IgM+IgD+ once they get activated and class switched. It is recommended to keep the cells in low density to prevent the activation, but be sure to avoid too low of a density because the cells will die. It is recommended to culture 5-10 mil cells in 50ml medium (T75 flask). However, if you don't care about the activation, for example, you will want to get mRNA or gDNA or proteins for molecular or biochemistry work, it is fine to increase the density to 0.5-1Mil/ml. CULTURE CONDITIONS: The first time you thaw the tube, after removing DMSO (spin with low speed, 700 rpm), resuspend the cells in a T75 flask with 30ml complete medium (RPMI 1640, supplemented with 10% heat-inactivated fetal bovine serum, 2 mM L-glutamine). Keep the flask horizontal. After two days, generally spin down the cells and remove debris (700rpm, 3 or 5 mins), resuspend the cells in 50ml medium until you have enough cells to freeze back. Change the medium 2-3 days by simply removing some supernatant and adding some fresh medium. The cell density should be controlled within the range between 0.1-0.2 mil/ml. They will be hyper-activated if too crowded, and die if too diluted. Freeze as many vials as you can from the beginning (around 5-8 vials). Each time you thaw one vial, freeze back 2-3 vials, culture the rest of the cells for your experiments, and discard all the cells after 4-5 generations. For new experiments, thaw a new vial.

Product Application Details

Application Notes	NBP1-49595 is useful to study the mechanism of B cell differentiation and survival in vitro during antibody responses. It is also useful to study gene regulation, function, and cellular and molecular events in B cells under normal or pathological conditions. THIS CELL LINE IS ONLY AVAILABLE TO NOT-FOR-PROFIT ACADEMIC INSTITUTIONS OR COMMERCIAL ENTITIES THAT HAVE SECURED A SEPERATE COMMERCIAL USE LICENSE. Please email monica@novusbio.com for more information.

Publications

Schmidt C, Christian L, Smith T et al. Lipid Rafts Interaction of the ARID3A Transcription Factor with EZRIN and G-Actin Regulates B-Cell Receptor Signaling Diseases 2021-03-20 [PMID: 33804610]

Bernstein RM, Mills FC, Mitchell M, Max EE. Complex mechanisms for inhibition of immunoglobulin gene expression in a germinal center B cell line. Mol Immunol;41(1):63-72. 2004-05-01 [PMID: 15140576]

Cerutti A, Zan H, Schaffer A, Bergsagel L, Harindranath N, Max EE, Casali P. CD40 ligand and appropriate cytokines induce switching to IgG, IgA, and IgE and coordinated germinal center and plasmacytoid phenotypic differentiation in a human monoclonal IgM+IgD+ B cell line. J Immunol;160(5):2145-57. 1998-03-01 [PMID: 9498752] (ICC/IF, WB, FLOW, Human)

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