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CELL COUNT- 03 - Automated cell count with Trypan Blue Solution by Cellometer Auto T4 Cell Counter

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Protocol status: Working
We use this protocol and it's working

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Keywords: cell count with trypan blue solution, automated cell count, cellometer auto t4 cell counter, dopaminergic receptors on cd4, patients with parkinson, constituent cannabidiol inhibit human polymorphonuclear leukocyte function, treg in drug, parkinson, cell, journal of neuroinflammation, dopaminergic receptor, neuroinflammation, mononuclear cell, dopamine receptor gene polymorphism, influence of dopamine receptor gene polymorphism, human polymorphonuclear leukocyte, trypan blue solution

Abstract

Published work using this protocol:

- Kustrimovic N., Comi C., Magistrelli L., Rasini E., Legnaro M., Bombelli R., Aleksic I., Blandini F., Minafra B., Riboldazzi G., Struchio A., Mauri M., Bono G., Marino F., Cosentino M. Parkinson's disease patients have a complex phenotypic and functional Th1 bias: cross-sectional studies of CD4+ Th1/Th2/T17 and Treg in drug-naïve and drug-treated patients (2018). Journal of neuroinflammation, 15(1), 205. https://doi.org/10.1186/s12974-018-1248-8

- Kustrimovic, N., Rasini, E., Legnaro, M., Bombelli, R., Aleksic, I., Blandini, F., Comi, C., Mauri, M., Minafra, B., Riboldazzi, G., Sanchez-Guajardo, V., Marino, F., & Cosentino, M. (2016). Dopaminergic Receptors on CD4+ T Naive and Memory Lymphocytes Correlate with Motor Impairment in Patients with Parkinson's Disease. Scientific reports, 6, 33738. https://doi.org/10.1038/srep33738

- Cosentino M., Ferrari M., Kustrimovic N., Rasini E., Marino F. (2015). Influence of dopamine receptor gene polymorphisms on circulating T lymphocytes: A pilot study in healthy subjects. Human immunology, 76, 10, 747-752. https://doi.org/10.1016/j.humimm.2015.09.032

- Boydum A.Isolation of mononuclear cells and granulocytes from human blood. Scand.J.Clin.Lab. Invest. 21 (Suppl.97): 77-89, 1968

- Alex Mabou Tagne, Franca Marino, Massimiliano Legnaro, Alessandra Luini, Barbara Pacchetti and Marco Cosentino. A Novel Standardized Cannabis sativa L. Extract and Its Constituent Cannabidiol Inhibit Human Polymorphonuclear Leukocyte Functions. Int J Mol Sci2019 Apr; 20(8): 1833. Published online 2019 Apr 13. doi: 10.3390/ijms20081833.

- Angela Scanzano, Laura Schembri, Emanuela Rasini, Alessandra Luini, Jessica Dallatorre, Massimiliano Legnaro, Raffaella Bombelli, Terenzio Congiu, Marco Cosentino, Franca Marino. Adrenergic Modulation of Migration, CD11b and CD18 Expression, ROS and interleukin-8 Production by Human Polymorphonuclear Leukocytes. Inflamm Res. 2015 Feb;64(2):127-35. doi: 10.1007/s00011-014-0791-8. Epub 2015 Jan 6.

Materials

Instruments needed:
- Plastic labware

Materials:
Trypan blue catalog number: T8154-100mL Sigma, Italy

Safety warnings

Cancerogenic solution, BE CAREFUL WHEN HANDLING IT!

1 For automatic cell count with Cellometer machine use Trypan Blue.

The machine will calculate the n°of cells/ml and the % of viability.

Take 10 µL of cell suspention and add an equal amount of **Trypan Blue**. Use all the volume to place it in the given counting chamber. Place the chamber inside Cellometer and count.

Document

NAME

SOLUTION- 09 - Trypan Blue solution

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Preview

Equipment

Cellometer Auto T4	NAME
Automated cell counter	TYPE
Nexcelom Bioscience	BRAND
EuroClone	SKU