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Luminex-Based Multiplex Cytokine Analysis

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We use this protocol and it's working

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Abstract

Multiplexed kit "Mouse High Sensitivity T Cell Magnetic Bead Panel" allows a Simultaneous analyze low levels of cytokine and chemokine biomarker with the High Sensitivity Bead-Based Multiplex Assays using the Luminex technology, in mouse serum, plasma and cell culture samples.

Attachments



[k4dub48if.docx](#)

13KB

Materials

Materials

- Mouse High Sensitivity T Cell Magnetic Bead Panel" (MHSTCMAG-70K, MILLIPLEX, EMD Millipore Corp., Billerica, MA, USA)
- FLEXMAP 3D® instrument (Luminex Corp., Austin, TX, USA)



Luminex-Based Multiplex Cytokine Analysis

- 1 Measure Cytokines from murine plasma samples, including IFN- γ , IL-1 β , IL-2, IL-4, IL-6, IL-10, IL-17A, and TNF- α simultaneously using the multiplexed kit "Mouse High Sensitivity T Cell Magnetic Bead Panel" (MHSTCMAG-70K, MILLIPLEX, EMD Millipore Corp., Billerica, MA, USA).
- 2 Perform the assay according to the manufacturer's instructions with an  Overnight incubation step (17 hours) at  4 °C .
- 3 Analyze samples as single values and use two controls with corresponding acceptance ranges, provided with the kit, for quality control purposes. 
- 4 Perform the readout on a FLEXMAP 3D® instrument (Luminex Corp., Austin, TX, USA).
- 5 Acquire data using Luminex xPONENT® software (version 4.3) and determine mean fluorescence intensity (MFI).
- 6 Use the Bio-Plex Manager™ software (version 6.2) (Bio-Rad, Hercules, CA, USA) for back-calculation of unknown cytokine concentrations. 