

**CONFIDENTIAL**

## Analysis Report

<b>Project Name</b>	Equine Cytokines Analysis Demo Report
<b>Sample Description</b>	conditioned media
<b>Sample Quantity</b>	10
<b>Order Number</b>	
<b>Client</b>	
<b>Project Date</b>	2023
<b>Remark</b>	

## 1. Sample Information

10 conditioned media samples were analyzed for FGF-2, G-CSF, GM-CSF, IL-6, IL-8, IL-17A, KC/GRO, MCP-1 with duplicates analysis.

## 2. Methods

The Luminex multiplexing technology is based on color-coded polystyrene beads. Bead coloration is achieved by utilizing different concentrations of red and infrared fluorophore dyes to create 100 uniquely-colored bead sets. These bead sets contain a unique color/fluorophore signature (that can be individually identified by the bead analyzer). So, they can then be combined within the same assay. Each analyte is distinguished from the other because they are bound to differently colored/fluorescent beads.

The bead analyzer (Bio-Plex 200) includes a dual-laser system and a flow-cytometry system. One laser activates the fluorescent dye within the beads which identifies the specific analyte. The second laser excites the fluorescent conjugate (streptavidin-phycoerythrin) that has been bound to the beads during the assay. The amount of the conjugate detected by the analyzer is in direct proportion to the amount of the target analyte. The results are quantified according to a standard curve.

Samples levels of the cytokines FGF-2, G-CSF, GM-CSF, IL-6, IL-8, IL-17A, KC/GRO, MCP-1 were determined using Multiplexing fluorescent Bead Assay.

## 3. Results

The results and raw data of the cytokine level in each sample was shown in the attached Spreadsheet.