



# Cytokine Analysis Services

Assessing the impact of pharmaceutical substances on the functionality of the immune system is critical for evaluating their safety profile. Cytokine release assays serve as a primary method to gauge the risk of adverse immune activation caused by pharmaceuticals. These assays provide insights into how drugs might influence immune responses, aiding in the design of more effective clinical trials and early identification of potential immune-related issues.

## Our Expertise

With years of specialized experience, we excel in cytokine analysis to bolster our clients' drug development endeavors. Utilizing cutting-edge platforms such as Cytation 5 (ELISA), MESO QuickPlex SQ 120 MM (MSD) and CytoFLEX (Flow Cytometry), we provide robust and precise cytokine profiling services. Our expertise ensures meticulous attention to detail, helping to elucidate the intricate immune responses crucial for advancing therapeutic strategies and meeting regulatory standards effectively.

Techniques	Principle	Advantages
ELISA (Enzyme-linked Immunosorbent Assay)	<ul style="list-style-type: none"> <li>Cytokine-specific antibodies are used for detection</li> <li>Amount of cytokine present is quantified via a colorimetric or fluorescent readout</li> </ul>	<ul style="list-style-type: none"> <li>High sensitivity, specificity, and quantification range</li> <li>Well-established and widely used method</li> </ul>
MSD (Meso Scale Discovery) Assay	<ul style="list-style-type: none"> <li>Electrochemiluminescence-based immunoassay</li> <li>Specific detection of antibodies spotted on different regions of the plate</li> </ul>	<ul style="list-style-type: none"> <li>Pre-established cytokine panels</li> <li>Enhanced sensitivity and dynamic range</li> <li>Multiplexing capability</li> </ul>
Flow Cytometry	<ul style="list-style-type: none"> <li>Individual beads have unique fluorescent profiles</li> <li>Capture antibodies specific for different cytokines are coupled to different beads</li> </ul>	<ul style="list-style-type: none"> <li>Enhanced sensitivity and dynamic range</li> <li>Multiplexing capability</li> <li>Low sample volume requirement</li> </ul>