Measure multiple signaling proteins in a single microplate well

Multiplex immunoassay kits for the Luminex® platform.

Examining the levels and interplay of critical signaling proteins often leads to the identification of specific disease biomarkers and novel drug targets. However, the biology and complex interactions of these proteins in health and disease can only be appreciated when they are evaluated collectively rather than individually. Multiplex immunoassays have become a powerful and cost-effective tool for measuring multiple analytes in samples with limited volumes.

We have recently released three magnetic bead–based kits for use on the Luminex® family of analyzers, including the Luminex® 100/200™, MAGPIX®, and FLEXMAP 3D® systems. The Luminex® immunoassay kits are designed to measure protein levels in serum, plasma, or tissue culture supernatant in a single day. With monoclonal antibodies for excellent reproducibility, these kits provide a fast, reliable, and accurate method for determining protein levels using small sample volumes.

Measure levels of six different cell adhesion molecules

While critical for regulating cell growth, differentiation, and migration in normal tissues, cell adhesion is also an important hallmark of inflammation. Cell adhesion molecules (CAMs) play a key role in many pathophysiological processes, including cancer as well as cardiovascular, autoimmune, and other inflammatory diseases. We offer the Human Adhesion Magnetic 6-Plex Panel for measuring levels of six different CAMs simultaneously on the Luminex® platform (Figures 1 and 2).

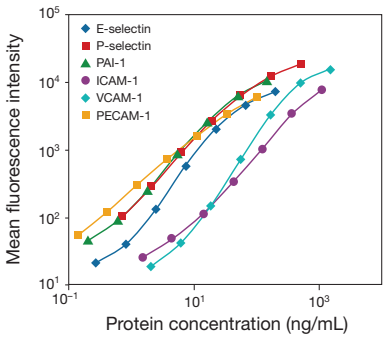

Figure 1. Typical standard curves for the Human Adhesion Magnetic 6-Plex Panel. Standard curves were created on the Luminex® 200™ System using the six recombinant protein standards provided in the Human Adhesion Magnetic 6-Plex Panel (Cat. No. LHC0016M).

Detect protein markers for cardiovascular disease

Elevated levels of apolipoproteins, C-reactive protein (CRP), and fibrinogen have each been associated with cardiovascular disease. Apolipoproteins bind to lipids such as cholesterol and transport lipids through the lymphatic and circulatory systems. ApoA1 and ApoB are the major protein components of high-density and low-density lipoproteins, respectively, whereas ApoE mediates transport and uptake of cholesterol. Adiponectin, a hormone secreted from adipose tissue, is important in regulating metabolism. We offer the Human Apolipoprotein Magnetic 5-Plex Panel for measuring apolipoproteins, adiponectin, and CRP. Due to high endogenous levels of fibrinogen (requiring extensive sample dilution), we recommend assaying it separately using the Human Fibrinogen Magnetic Singleplex Panel.

Learn more about multiplex assays for the Luminex® platform

The flexible Luminex® platform integrates key xMAP® detection components to meet the multiplex needs of both research and clinical labs. To learn more about our magnetic bead–based Luminex® assays, visit **lifetechnologies.com/luminexbp70**. ■

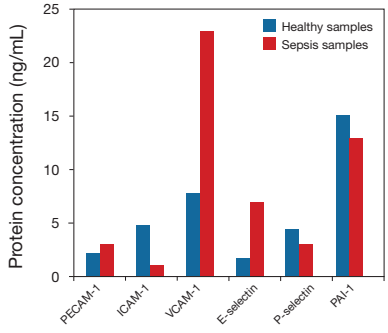

Figure 2. Serum protein levels of adhesion molecules in normal serum and serum from a patient with sepsis. Data were collected using the Human Adhesion Magnetic 6-Plex Panel on the Luminex® 200™ System.

Product	Targets	Cat. No.
Human Adhesion Magnetic 6-Plex Panel	ICAM, VCAM, E-selectin, P-selectin, PECAM-1, PAI-1	LHC0016M
Human Fibrinogen Magnetic Singleplex Kit	Fibrinogen	LHP0091M
Human Apoliprotein Magnetic 5-Plex Panel	ApoA1, ApoB, ApoE, Adiponectin, CRP	LHP0001M

Each panel or kit provides sufficient reagents for 100 tests.