Species Reactivity: Human
Specificity: Detects human VCAM-1 in ELISAs and Western blots. In sandwich immunoassays, less than 0.1% cross-reactivity with rmVCAM-1, rhICAM-1, rhICAM-2, rhICAM-3, and rhMCAM is observed.
Source: Polyclonal Sheep IgG
Purification: Antigen Affinity-purified
Immunogen: Chinese hamster ovary cell line CHO-derived recombinant human VCAM-1 Extracellular domain
Formulation: Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

APPLICATIONS
Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

<table>
<thead>
<tr>
<th>Sample</th>
<th>Recommended Concentration</th>
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</thead>
<tbody>
<tr>
<td>Human VCAM-1/CD106 Sandwich Immunoassay Reagent</td>
<td>2-8 µg/mL</td>
</tr>
<tr>
<td>ELISA Capture Standard</td>
<td>0.1-0.4 µg/mL</td>
</tr>
<tr>
<td>Human VCAM-1/CD106 (Catalog # 809-VR)</td>
<td>Recombinant Human VCAM-1/CD106 (Catalog # MAB809)</td>
</tr>
<tr>
<td>Human VCAM-1/CD106 (Catalog # BAF809)</td>
<td>Recombinant Human VCAM-1/CD106 (Catalog # 809-VR)</td>
</tr>
</tbody>
</table>

PREPARATION AND STORAGE
Reconstitution: Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping: The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage: Use a manual defrost freezer and avoid repeated freeze-thaw cycles.
- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND
Human VCAM-1 (CD106), a member of the Immunoglobulin Superfamily, is a cell surface protein expressed by activated endothelial cells and certain leukocytes (such as macrophages). VCAM-1 expression is induced by IL-1β, IL-4, TNF-α and IFN-γ. VCAM-1 binds to leukocyte integrins VLA-4 and α4β7. During the inflammatory adhesion mechanism, activated integrins halt rolling leukocytes and attach them firmly to the vascular endothelium. They do this by binding to their ligands, for example VCAM-1, on endothelium. The VCAM-1: VLA-4/α4β7 interaction is also thought to be involved in the extravasation of white blood cells through the blood vessel wall to sites of inflammation. ELISA techniques have shown that detectable levels of soluble VCAM-1 are present in the biological fluids of apparently normal individuals. Furthermore, a number of studies have reported that levels of VCAM-1 may be elevated or lowered in subjects with a variety of pathological conditions.