# Recombinant Human P-Selectin/CD62P

**Catalog Number:** ADP3

## DESCRIPTION

**Source**
Chinese Hamster Ovary cell line, CHO-derived Trp42-Ala771
Accession # P16109

**N-terminal Sequence Analysis**

<table>
<thead>
<tr>
<th>Trp42</th>
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</table>

**Predicted Molecular Mass**
80 kDa

## SPECIFICATIONS

<table>
<thead>
<tr>
<th>Activity</th>
<th>Measured by the ability of the immobilized protein to support the adhesion of U937 human histiocytic lymphoma cells. When 5 x 10^4 cells/well are added to human sP-Selectin coated plates (10 μg/mL with 100 μL/well), &gt;50% will adhere after 1 hour incubation at room temperature.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Endotoxin Level</td>
<td>&lt;0.10 EU per 1 μg of the protein by the LAL method.</td>
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<tr>
<td>Purity</td>
<td>&gt;97%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.</td>
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<tr>
<td>Formulation</td>
<td>Lyophilized from a 0.2 μm filtered solution in PBS containing Calcium and Magnesium with Sorbitol. See Certificate of Analysis for details.</td>
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</tbody>
</table>

## PREPARATION AND STORAGE

**Reconstitution**
Reconstitute at 1 mg/mL in sterile, deionized water.

**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.
- 3 months, -20 to -70 °C under sterile conditions after reconstitution.

## BACKGROUND

Human P-Selectin (GMP-140, LECAM-3, PADGEM, CD62P), a member of the Selectin family, is a cell surface glycoprotein expressed by activated platelets and endothelial cells. P-Selectin is translocated to the cell surface within minutes, from alpha granules of platelets or Weibel-Palade bodies of endothelial cells, following stimulation with thrombin, histamine, PMA or peroxides. P-Selectin binds to a 106 kDa protein present on myeloid cells, neutrophils, monocytes and lymphocytes, termed PSGL-1 (P-Selectin glycoprotein ligand-1).

P-Selectin plays a role in the adhesion of leukocytes and neutrophils to the endothelium. Acting in cooperation with L Selectin, P-Selectin mediates the initial interaction of circulating leukocytes with endothelial cells that produces a characteristic ‘rolling’ of the leukocytes on the endothelium. This initial interaction is followed by a stronger interaction involving E-Selectin, and later ICAM-1 and VCAM-1, that leads eventually to extravasation of the white blood cell through the blood vessel wall into the extracellular matrix tissue.

ELISA techniques have shown that detectable levels of soluble P-Selectin are present in the biological fluids of apparently normal individuals. Furthermore, a number of studies have reported that levels of P-Selectin may be elevated or lowered in subjects with a variety of pathological conditions.