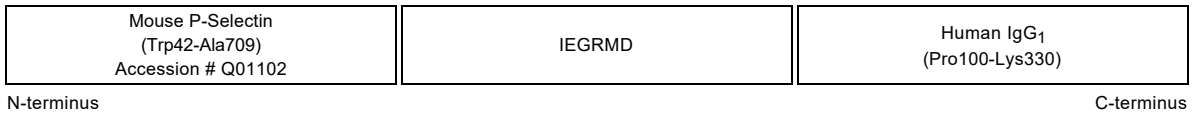
Recombinant Mouse P-Selectin/CD62P Fc Chimera

Catalog Number: 737-PS

DESCRIPTION

Source

Mouse myeloma cell line, NS0-derived mouse P-Selectin/CD62P protein



N-terminal Sequence Analysis	Trp42
Structure / Form	Disulfide-linked homodimer
Predicted Molecular Mass	99.1 kDa (monomer)

SPECIFICATIONS

SDS-PAGE	127-140 kDa, reducing conditions
Activity	Measured by the ability of the immobilized protein to support the adhesion of U937 human histiocytic lymphoma cells. P-Selectin/Fc Chimera immobilized at 10 µg/mL will induce greater than 50% adhesion on U937 cells. **Optimal dilutions should be determined be each laboratory for each application.**
Endotoxin Level	<1.0 EU per 1 µg of the protein by the LAL method.
Purity	>90%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 100 µg/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. • 3 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Mouse 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.

Mouse P-Selectin cDNA encodes a 768 amino acid (aa) residue type I transmembrane protein with a 41 aa signal peptide, a 668 aa extracellular domain, a transmembrane domain and a short (35 aa) cytoplasmic domain. The extracellular domain has an NH_2-terminal C-type lectin domain and an EGF-like domain followed by a series of complement factor A repeat homology domains. The extracellular domains of human and mouse P-Selectin share approximately 73% sequence homology.

References:

1. Kansas, G.S. (1996) Blood **88**:3259.
2. McEver, R.P. and R.D. Cummings (1997) J. Clin. Invest. **100**:485.

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