



Recombinant Protein Technical Manual
Recombinant Human CD68/Macrosialin Protein (aa
1-319, His Tag)
RPES2997

Product Data:

Product SKU: RPES2997

Size: 50µg

Species: Human

Expression host: Baculovirus-Insect Cells

Uniprot: P34810

Protein Information:

Molecular Mass: 32.9 kDa

AP Molecular Mass: 68 kDa

Tag: C-His

Bio-activity:

Purity: > 98 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile 20mM Tris, 500mM NaCl, pH 7.4, 10% gly

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: GP110;LAMP4;SCARD1

Immunogen Information:

Sequence: Met 1-Ser 319

Background:

Macrosialin, also known as CD68 and Gp110, is a single-pass type I membrane protein which belongs to the LAMP family. CD68 is highly expressed by blood monocytes and tissue macrophages. It is also expressed in lymphocytes, fibroblasts and endothelial cells. CD68 is expressed in many tumor cell lines which could allow them to attach to selectins on vascular endothelium, facilitating their dissemination to secondary sites. CD68 plays a role in phagocytic activities of tissue macrophages, both in intracellular lysosomal metabolism and extracellular cell-cell and cell-pathogen interactions. It is a commonly used marker for macrophages. However, a number of studies have shown that CD68 antibodies react with other hematopoietic and non-hematopoietic cell types, suggesting that CD68 may not be a macrophage-specific antigen. CD68 binds to tissue- and organ-specific lectins or selectins, allowing homing of macrophage subsets to particular sites. Rapid recirculation of CD68 from endosomes and lysosomes to the plasma membrane may allow macrophages to crawl over selectin-bearing substrates or other cells.