Recombinant Protein Technical Manual

Recombinant Human CD20/MS4A1 Protein (TrxA Tag)

RPES0480

Product Data:

Product SKU: RPES0480

Size: 100µg

Species: Human

Expression host: E. coli

Uniprot: NP_068769.2

Protein Information:

Molecular Mass: 23.9 kDa

AP Molecular Mass:

Tag: N-TrxA

Bio-activity:

Purity: > 80 % as determined by reducing SDS-PAGE.

Endotoxin: Please contact us for more information.

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℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.

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

Formulation: Lyophilized from sterile 50 mM Tris, 150 mM NaCl, 1 mM EDTA, pH 8.0

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

Application:

Synonyms: B1;Bp35;CD20;CVID5;LEU6;MS4A1;MS4A2;S7

Immunogen Information:

Sequence: Ile 141-Ser 188

Background:

CD20 (membrane-spanning 4-domains, subfamily A, member 1), also known as MS4A1, is a member of the membrane-spanning 4A gene family. Members of this nascent protein family are characterized by common structural features and similar intron/exon splice boundaries and display unique expression patterns among hematopoietic cells and nonlymphoid tissues. CD20 / MS4A1 is expressed on all stages of B cell development except the first and last. CD20 / MS4A1 is present from pre-pre B cells through memory cells, but not on either pro-B cells or plasma cells. It is a B-lymphocyte surface molecule which plays a role in the development and differentiation of B-cells into plasma cells. CD20 / MS4A1may be involved in the regulation of B-cell activation and proliferation. Defects in CD20 / MS4A1 are the cause of immunodeficiency common variable type 5(CVID5). CVID5 is a primary immunodeficiency characterized by antibody deficiency, hypogammaglobulinemia, recurrent bacterial infections and an inability to mount an antibody response to antigen. The defect results from a failure of B-cell differentiation and impaired secretion of immunoglobulins; the numbers of circulating B-cells is usually in the normal range, but can be low.