

## Recombinant Human CD20/MS4A1 Protein (TrxA Tag)

Catalog No. PKSH030304

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

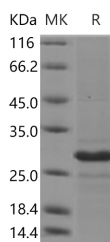
### Description

<b>Synonyms</b>	B1;Bp35;CD20;CVID5;LEU-16;MS4A1;MS4A2;S7
<b>Species</b>	Human
<b>Expression Host</b>	E.coli
<b>Sequence</b>	Ile 141-Ser 188
<b>Accession</b>	NP_068769.2
<b>Calculated Molecular Weight</b>	23.9 kDa
<b>Tag</b>	N-Trx
<b>Bioactivity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 80 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	Please contact us for more information.
<b>Storage</b>	Generally, 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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from sterile 50 mM Tris, 150 mM NaCl, 1 mM EDTA, pH 8.0 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 80 % as determined by reducing SDS-PAGE.

### 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

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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 / MS4A1 may 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.