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Datasheet for ABIN7199048
CD20 Protein-VLP

Overview

Quantity:	100 µg
Target:	CD20 (MS4A1)
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	VLP

Product Details

Purpose:	Human CD20 Full Length Protein-VLP (HEK293)
Sequence:	Met 1 - Pro 297
Characteristics:	Human CD20 Full Length Protein-VLP (CDP-H52P6) is expressed from human 293 cells (HEK293). It contains AA Met 1 - Pro 297 (Accession # P11836-1).
Endotoxin Level:	Less than 1.0 EU per µg by the LAL method.

Target Details

Target:	CD20 (MS4A1)
Alternative Name:	CD20 (MS4A1 Products)
Background:	Synonyms: MS4A1,CD20,MS4A-1, Description: B-lymphocyte antigen CD20 is also known as B-lymphocyte surface antigen B1, Leukocyte surface antigen Leu-16, Membrane-spanning 4-domains subfamily A member 1 and MS4A1, is an activated-glycosylated phosphoprotein expressed on the surface of all B-cells beginning at the pro-B phase (CD45R+, CD117+) and progressively increasing in concentration

Target Details

until maturity. CD20 is expressed on all stages of B cell development except the first and last, it is present from late pro-B cells through memory cells, but not on either early pro-B cells or plasma blasts and plasma cells. It is found on B-cell lymphomas, hairy cell leukemia, B-cell chronic lymphocytic leukemia, and melanoma cancer stem cells. The protein has no known natural ligand and its function is to enable optimal B-cell immune response, specifically against T-independent antigens. It is suspected that it acts as a calcium channel in the cell membrane. CD20 / MS4A1 is the target of the monoclonal antibodies (mAb) rituximab, Ibritumomab tiuxetan, and tositumomab, which are all active agents in the treatment of all B cell lymphomas and leukemias. Defects in CD20 / MS4A1 are the cause of immunodeficiency common variable type 5 (CVID5), also called antibody deficiency due to CD20 defect. CVID5 is a primary immunodeficiency characterized by antibody deficiency, hypogammaglobulinemia, recurrent bacterial infections and an inability to mount an antibody response to antigen.

Molecular Weight: 33.1 kDa

NCBI Accession: [NP_068769](#)

Application Details

Application Notes: This protein carries no "tag". The protein has a calculated MW of 33.1 kDa.

Comment: Virus-like particles (VLPs) are formed by self-assembly of envelop/capsid proteins from viruses. Membrane Proteins can be constituted in-situ with VLPs produced from HEK293 cell cultures. These VLPs concentrate conformationally intact membrane proteins directly on the cell surface and produce soluble, high-concentration proteins perfect for immunization and antibody screening.

The VLPs provide the display of properly folded membrane proteins in their native cellular membrane in a compact size of 100~300 nm diameter (similar to the size of most viruses) making it optimal targets for dendritic cells in vivo and surface attachment for phage display.

Restrictions: For Research Use only

Handling

Format: Liquid

Buffer: PBS, pH 7.4

Storage: -80 °C

Storage Comment: -70°C