

Recombinant Anti-MS4A1 Antibody (V3S-0522-YC637)

Cat. No.: V3S-0522-YC637

Summary

Description	This product is a monoclonal antibody derived from Human (<i>Homo sapiens</i>), which can specifically recognize Membrane Spanning 4-Domains A1. The antibody is expressed with mammalian cell transient expression system, serum-free and purified by affinity chromatography. The purity and integrity are tested via SDS-PAGE and SEC-HPLC analysis. Given an antigen, additional QC measures are also desired such as affinity testing and binding validation. Specifically, the antibody is provided in multiple formats for in vivo and in vitro assays. The <i>In vivo</i> version features greater than 95% purity, ultra-low endotoxin levels (<1 EU/mg or 0.1 EU/mg), and is preservative, stabilizer, and carrier protein-free.
Clonality	Monoclonal
Host Species	Human
Target Species	Human
Isotype	IgG1
Isotype Control	C67002; C43061
Secondary Antibody	C32400; C75370; C10513; C51635; C45530; C61612; C23324

Property

Expression Species	HEK293F or CHO
Conjugation	None
Purity	>95%, determined by SDS-PAGE and/or SEC-HPLC
Endotoxin	<1 EU/mg, determined by LAL method
Purification	Protein A affinity purified
Sterility	0.2 µM filtered
Formulation	PBS, pH 7.4
Preservation	No preservatives
Stabilizer	No stabilizers
Storage	Store at 4°C within a week. For longer storage, aliquot and store at -20°C.

Applications

For lab research use only, not for diagnostic, therapeutic or any *in vivo* human use.

Application	ELISA; FC
Application Notes	The antibody is recommended for detection of MS4A1 by ELISA, FC assays.

Target

Target	MS4A1
Alternative Name	Membrane Spanning 4-Domains A1; Membrane-Spanning 4-Domains, Subfamily A, Member 1; Leukocyte Surface Antigen Leu-16; CD20 Antigen; CD20; Bp35; Membrane-Spanning 4-Domains Subfamily A Member 1; B-Lymphocyte Cell-Surface Antigen B1; B-Lymphocyte Surface Antigen B1;
Gene ID	931
UniProt	P11836
Introduction	This gene encodes 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 non-lymphoid tissues. MS4A1 B-lymphocyte-specific membrane protein that plays a role in the regulation of cellular calcium influx necessary for the development, differentiation, and activation of B-lymphocytes. Functions as a store-operated calcium (SOC) channel component promoting calcium influx after activation by the B-cell receptor/BCR. Belongs to the MS4A family.
Research Area	Immunology
Proceedings of R&D	Diseases associated with MS4A1 include Immunodeficiency, Common Variable, 5 and Common Variable Immunodeficiency. Among its related pathways are Hematopoietic Stem Cell Differentiation Pathways and Lineage-specific Markers and Hematopoietic cell lineage. Gene Ontology (GO) annotations related to this gene include epidermal growth factor receptor binding and MHC class II protein complex binding. An important paralog of this gene is MS4A8.

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