

MARCH1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14345c

Specification

MARCH1 Antibody (Center) - Product Information

Application WB,E
Primary Accession OBTC01

Other Accession <u>Q6NZQ8</u>, <u>NP 060393.1</u>, <u>NP 001159845.1</u>

Reactivity
Host
Clonality
Polyclonal
Isotype
Calculated MW
Antigen Region

Mouse
Rabbit
Polyclonal
Rabbit IgG
32308
163-191

MARCH1 Antibody (Center) - Additional Information

Gene ID 55016

Other Names

E3 ubiquitin-protein ligase MARCH1, 632-, Membrane-associated RING finger protein 1, Membrane-associated RING-CH protein I, MARCH-I, RING finger protein 171, MARCH1, RNF171

Target/Specificity

This MARCH1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 163-191 amino acids from the Central region of human MARCH1.

Dilution

WB~~1:1000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

MARCH1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

MARCH1 Antibody (Center) - Protein Information

Name MARCHF1 (HGNC:26077)



Synonyms MARCH1, RNF171

Function E3 ubiquitin-protein ligase that mediates ubiquitination of TFRC, CD86, FAS and MHC class II proteins, such as HLA-DR alpha and beta, and promotes their subsequent endocytosis and sorting to lysosomes via multivesicular bodies (PubMed:<u>18389477</u>, PubMed:<u>18305173</u>, PubMed:<u>35045264</u>). By constitutively ubiquitinating MHC class II proteins in immature dendritic cells, down-regulates their cell surface localization thus sequestering them in the intracellular endosomal system. Also regulates insulin sensitivity by controlling surface expression of the insulin receptor subunit beta/INSR by direct ubiquitination and degradation (PubMed:<u>27577745</u>).

Cellular Location

Golgi apparatus, trans-Golgi network membrane {ECO:0000250|UniProtKB:Q6NZQ8}; Multi-pass membrane protein. Lysosome membrane; Multi- pass membrane protein. Cytoplasmic vesicle membrane; Multi-pass membrane protein. Late endosome membrane; Multi-pass membrane protein. Early endosome membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein

Tissue Location

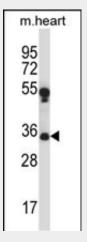
Expressed in antigen presenting cells, APCs, located in lymph nodes and spleen. Also expressed in lung. Expression is high in follicular B-cells, moderate in dendritic cells and low in splenic T-cells.

MARCH1 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

MARCH1 Antibody (Center) - Images



MARCH1 Antibody (Center) (Cat. #AP14345c) western blot analysis in mouse heart tissue lysates (35ug/lane). This demonstrates the MARCH1 antibody detected the MARCH1 protein (arrow).



MARCH1 Antibody (Center) - Background

MARCH1 is a member of the MARCH family of membrane-bound E3 ubiquitin ligases (EC 6.3.2.19). MARCH proteins add ubiquitin (see MIM 191339) to target lysines in substrate proteins, thereby signaling their vesicular transport between membrane compartments. MARCH1 downregulates the surface expression of major histocompatibility complex (MHC) class II molecules (see MIM 142880) and other glycoproteins by directing them to the late endosomal/lysosomal compartment (Bartee et al., 2004 [PubMed 14722266]; Thibodeau et al., 2008 [PubMed 18389477]; De Gassart et al., 2008 [PubMed 18305173]).

MARCH1 Antibody (Center) - References

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010): Thibodeau, J., et al. Eur. J. Immunol. 38(5):1225-1230(2008) De Gassart, A., et al. Proc. Natl. Acad. Sci. U.S.A. 105(9):3491-3496(2008) Bartee, E., et al. J. Virol. 78(3):1109-1120(2004)