

MARCH2 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP59227

Product Information

Application WB, IHC-P, IHC-F, IF, E

Primary Accession
Reactivity
Rat
Host
Clonality
Polyclonal
Calculated MW
Physical State

Q9P0N8
Rat
Polyclonal
Liquid

Immunogen KLH conjugated synthetic peptide derived from human MARCH2

Epitope Specificity 151-246/246

Isotype IgG

Purity affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Endoplasmic reticulum membrane. Lysosome membrane. Endosome

membrane.

SIMILARITY Contains 1 RING-CH-type zinc finger.

SUBUNIT Interacts with STX6 (By similarity). Interacts with MARCH3.

Important Note This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

Background Descriptions Ubiquitination is an important mechanism through which three classes of

enzymes act in concert to target short-lived or abnormal proteins for destruction. The three classes of enzymes involved in ubiquitination are the ubiquitin-activating enzymes (E1s), the ubiquitin-conjugating enzymes (E2s) and the ubiquitin-protein ligases (E3s). MARCH2 (membrane-associated ring finger (C3HC4) 2), also known as RNF172 or HSPC240, is a 246 amino acid multi-pass membrane protein that localizes to the endoplasmic reticulum and

contains one RING-CH-type zinc finger. Expressed in a variety of tissues, MARCH2 functions as an E3 ubiquitin-protein ligase that is thought to mediate the ubiquitination and subsequent degradation of CD71 and B7-2 and may be

involved in endosomal protein trafficking.

Additional Information

Gene ID 51257

Other Names E3 ubiquitin-protein ligase MARCHF2, 2.3.2.27, Membrane-associated RING

finger protein 2, Membrane-associated RING-CH protein II, MARCH-II, RING finger protein 172, RING-type E3 ubiquitin transferase MARCHF2, MARCHF2

(HGNC:28038), MARCH2, RNF172

Target/Specificity Broadly expressed.

Dilution WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:50-200,ELISA=1:5000-

10000

Format 0.01 M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

Storage Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

Protein Information

Name MARCHF2 (HGNC:28038)

Synonyms MARCH2, RNF172

Function E3 ubiquitin-protein ligase that may mediate ubiquitination of TFRC and

CD86, and promote their subsequent endocytosis and sorting to lysosomes via multivesicular bodies. E3 ubiquitin ligases accept ubiquitin from an E2 ubiquitin-conjugating enzyme in the form of a thioester and then directly

transfer the ubiquitin to targeted substrates (PubMed: 14722266,

PubMed:<u>16428329</u>). Together with GOPC/CAL mediates the ubiquitination and lysosomal degradation of CFTR (PubMed:<u>23818989</u>). Ubiquitinates and therefore mediates the degradation of DLG1 (PubMed:<u>17980554</u>). Regulates the intracellular trafficking and secretion of alpha1-antitrypsin/SERPINA1 and

HP/haptoglobin via ubiquitination and degradation of the cargo receptor ERGIC3 (PubMed:31142615). Negatively regulates the antiviral and antibacterial immune response by repression of the NF-kB and type 1 IFN signaling pathways, via MARCHF2-mediated K48-linked polyubiquitination of

IKBKG/NEMO, resulting in its proteasomal degradation (PubMed:32935379). May be involved in endosomal trafficking through interaction with STX6

(PubMed:15689499).

Cellular Location Endoplasmic reticulum membrane; Multi-pass membrane protein

{ECO:0000250 | UniProtKB:Q5I0I2}. Lysosome membrane; Multi-pass membrane protein. Endosome membrane; Multi- pass membrane protein {ECO:0000250 | UniProtKB:Q5I0I2}. Golgi apparatus membrane; Multi-pass membrane protein. Cytoplasm. Cell membrane; Multi-pass membrane protein

Tissue Location Broadly expressed..

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.