

MARCH6 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP59229

Product Information

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

Primary Accession 060337

Reactivity Rat, Pig, Dog, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 102545
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived from human MARCH6

Epitope Specificity 1-100/910 **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; Multi pass membrane protein.

SIMILARITY Contains 1 RING-CH-type zinc finger.

SUBUNIT Interacts with DIO2.

Post-translational Auto-ubiquitinated, which results in proteasomal degradation. **modifications**

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

human, therapeutic or diagnostic applications.

Background Descriptions MARCH6 (Membrane associated RING finger protein 6) belongs to the MARCH

family, which contains at least seven membrane associated RING-CH

(MARCH)proteins. MARCH proteins are E3 ubiquitin ligases and are located to

subcellular membranes.

Additional Information

Gene ID 10299

Other Names E3 ubiquitin-protein ligase MARCHF6, 2.3.2.27, Doa10 homolog,

Membrane-associated RING finger protein 6, Membrane-associated RING-CH protein VI, MARCH-VI, Protein TEB-4, RING finger protein 176, RING-type E3

ubiquitin transferase MARCHF6, MARCHF6 (HGNC:30550)

Target/Specificity Present in brain (at protein level).

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

10000

Format 0.01M 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

MARCHF6 (<u>HGNC:30550</u>)

Function

Endoplasmic reticulum membrane-associated E3 ubiquitin ligase that plays a critical role in mitigating endoplasmic reticulum stress, the regulation of cholesterol and lipid homeostasis, and ferroptosis (PubMed: 25088257, PubMed:35941365, PubMed:39216628). Acts as a pivotal component of both the Ac/N-degron pathway (targeting the N-terminal acetyl group of substrates) and the ER-associated protein degradation-cytosol (ERAD-C) pathway (targeting misfolded substrates) (PubMed:30425097, PubMed:35941365). For instance, mediates the degradation of Ac/N-degron-bearing proteins such as the G-protein regulator RGS2 and the lipid droplet protein PLIN2 (PubMed:39216628). Suppresses endoplasmic reticulum stress and ferroptosis through cytosolic POMC degradation (By similarity). Prevents ferroptosis by acting as a NADPH sensor during lipid peroxidation through its C- terminal regulatory region (PubMed:35941365). Facilitates also the degradation of selected endoplasmic reticulum proteins by associating with signal peptide peptidase for the turnover of endogenous tailanchored proteins (PubMed: 29519897). Promotes ubiquitination of DIO2, leading to its degradation (PubMed: 19651899). By ubiquitinating and thereby modulating the stability of many proteins of the cholesterol pathway including SQLE, CYP51A1, CYP11A1 and HMGCR, acts as a crucial post-translational regulator of cholesterol synthesis (PubMed: 24449766, PubMed:31904814, PubMed:36958722).

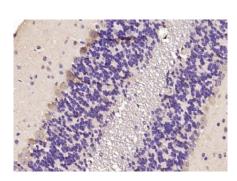
Cellular Location

Endoplasmic reticulum membrane; Multi-pass membrane protein

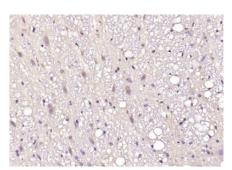
Tissue Location

Present in brain (at protein level).

Images



Paraformaldehyde-fixed, paraffin embedded (mouse cerebellum); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (MARCH6) Polyclonal Antibody, Unconjugated (AP59229) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (MARCH6) Polyclonal Antibody, Unconjugated (AP59229) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

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