

MARCH8 Antibody (Center) Blocking Peptide

Synthetic peptide Catalog # BP1452c

Specification

MARCH8 Antibody (Center) Blocking Peptide - Product Information

Primary Accession Q5T0T0
Other Accession NP 659458

MARCH8 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 220972

Other Names

E3 ubiquitin-protein ligase MARCH8, 632-, Cellular modulator of immune recognition, c-MIR, Membrane-associated RING finger protein 8, Membrane-associated RING-CH protein VIII, MARCH-VIII, RING finger protein 178, MARCH8, MIR, RNF178

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP1452c was selected from the Center region of human MARCH8. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

MARCH8 Antibody (Center) Blocking Peptide - Protein Information

Name MARCHF8 (HGNC:23356)

Synonyms MARCH8, MIR, RNF178

Function

E3 ubiquitin-protein ligase that plays several important roles in innate immunity and adaptive immunity (PubMed:34285233, PubMed:35019698, PubMed:35503863). Mediates ubiquitination of CD86 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:<a href="http://www.uniprot.org/citations/19117940"



target="_blank">19117940, PubMed:19566897). Possesses a very broad antiviral activity by specifically inactivating different viral fusion proteins (PubMed:32934085). Targets and ubiquitinates cytoplasmic lysine residues of viral envelope glycoproteins with single transmembrane domains leading to their lysosomal degradation (PubMed:35019698). Therefore, shows broad-spectrum inhibition against many viruses including retroviruses, rhabdoviruses, arenaviruses, sarbecoviruses or influenzaviruses (PubMed:35019698, PubMed:34285233). Strongly blocks human immunodeficiency virus type 1 envelope glycoprotein incorporation into virions by down-regulating its cell surface expression. Blocks also ebola virus glycoprotein/GP incorporation via surface down-regulation (PubMed:32934085). Mediates 'Lys-63'-linked polyubiquitination of influenza M2 to target it to lysosome for degradation (PubMed:34285233). Mediates the regulation of constitutive ubiquitination and trafficking of the viral restriction factor BST2 within the endocytic pathway (PubMed:28320822). Plays a role in maintenance of immune tolerance to self by promoting the turnover and proteasomal degradation of PD-L1/CD274 via ubiquitination (PubMed:34183449). Catalyzes the 'Lys-63'-linked polyubiquitylation of cGAS thereby inhibiting its DNA binding ability and impairing its antiviral innate immunity (PubMed:35503863).

Cellular Location

Golgi apparatus membrane. Endoplasmic reticulum membrane. Cytoplasmic vesicle membrane; Multi-pass membrane protein. Lysosome membrane; Multi-pass membrane protein. Early endosome membrane; Multi-pass membrane protein

Tissue Location

Broadly expressed. Present in immature dendritic cells (at protein level).

MARCH8 Antibody (Center) Blocking Peptide - Protocols

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

• Blocking Peptides

MARCH8 Antibody (Center) Blocking Peptide - Images

MARCH8 Antibody (Center) Blocking Peptide - Background

MARCH8 is an E3 ubiquitin-protein ligase that may regulate immune responses by promoting ubiquitination of MHC-II and CD86, which leads to their subsequent endocytosis and lysosomal degradation. May also promote ubiquitination and endocytosis of TFRC and FAS. 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.

MARCH8 Antibody (Center) Blocking Peptide - References

Bartee, E., et al., J. Virol. 78(3):1109-1120 (2004).Goto, E., et al., J. Biol. Chem. 278(17):14657-14668 (2003).