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GBP5 Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP17262a

Specification

GBP5 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession Q96PP8

GBP5 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 115362

Other Names
Guanylate-binding protein 5, GBP-TA antigen, GTP-binding protein 5, GBP-5, Guanine nucleotide-binding protein 5, GBP5

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.

GBP5 Antibody (N-term) Blocking Peptide - Protein Information

Name GBP5 {ECO:0000303|PubMed:20180847, ECO:0000312|HGNC:HGNC:19895}

Function
Interferon (IFN)-inducible GTPase that plays important roles in innate immunity against a diverse range of bacterial, viral and protozoan pathogens (By similarity). Hydrolyzes GTP, but in contrast to other family members, does not produce GMP (PubMed:20180847). Following infection, recruited to the pathogen-containing vacuoles or vacuole- escaped bacteria and acts as a positive regulator of inflammasome assembly by promoting the release of inflammasome ligands from bacteria (By similarity). Acts by promoting lysis of pathogen-containing vacuoles, releasing pathogens into the cytosol (By similarity). Following pathogen release in the cytosol, promotes recruitment of proteins that mediate bacterial cytolysis: this liberates ligands that are detected by inflammasomes, such as lipopolysaccharide (LPS) that activates the non-canonical CASP4/CASP11 inflammasome or double- stranded DNA (dsDNA) that activates the AIM2 inflammasome (By similarity). As an activator of NLRP3 inflammasome assembly: promotes selective NLRP3 inflammasome assembly in response to microbial and soluble, but not crystalline, agents (PubMed:22461501). Independently of its GTPase activity, acts as an inhibitor of various viruses infectivity, such as HIV-1, Zika and influenza A viruses, by inhibiting FURIN-mediated maturation of viral envelope proteins (PubMed:<a href="http://www.uniprot.org/citations/26996307"

target="_blank">26996307, PubMed:31091448).

Cellular Location
Cytoplasmic vesicle membrane {ECO:0000250|UniProtKB:Q8CFB4}; Lipid-anchor, GPI-like-anchor. Golgi apparatus membrane; Lipid-anchor. Cytoplasm

Tissue Location
Expressed in peripheral blood monocytes (at protein level).

GBP5 Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

GBP5 Antibody (N-term) Blocking Peptide - Images

GBP5 Antibody (N-term) Blocking Peptide - Background

Belongs to the GBP family.

GBP5 Antibody (N-term) Blocking Peptide - References

Davila, S., et al. Genes Immun. 11(3):232-238(2010)Wehner, M., et al. FEBS J. 277(7):1597-1605(2010)Ito, Y., et al. J. Infect. Dis. 197(5):663-666(2008)Tripal, P., et al. J. Interferon Cytokine Res. 27(1):44-52(2007)Fellenberg, F., et al. J. Invest. Dermatol. 122(6):1510-1517(2004)