

GBP5 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17262a

Specification

GBP5 Antibody (N-term) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW Antigen Region WB,E <u>O96PP8</u> <u>NP_443174.1</u>, <u>NP_001127958.1</u> Human Rabbit Polyclonal Rabbit IgG 66617 140-167

GBP5 Antibody (N-term) - 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

Target/Specificity

This GBP5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 140-167 amino acids from the N-terminal region of human GBP5.

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

GBP5 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

GBP5 Antibody (N-term) - 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:<u>20180847</u>). 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 inflammasome or double- stranded DNA (dsDNA) that activates the non-canonical CASP4/CASP11 inflammasome assembly in response to microbial and soluble, but not crystalline, agents (PubMed:<u>22461501</u>). 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:<u>26996307</u>, PubMed:<u>31091448</u>).

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) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- GBP5 Antibody (N-term) Images



GBP5 Antibody (N-term) (Cat. #AP17262a) western blot analysis in T47D cell line lysates (35ug/lane).This demonstrates the GBP5 antibody detected the GBP5 protein (arrow).



GBP5 Antibody (N-term) - Background

Belongs to the GBP family.

GBP5 Antibody (N-term) - 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)