

GBP3 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP18451b

Specification

GBP3 Antibody (C-term) - Product Information

Application WB,E **Primary Accession 09H0R5** Other Accession NP 060754.2 Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 68114 Antigen Region 502-528

GBP3 Antibody (C-term) - Additional Information

Gene ID 2635

Other Names

Guanylate-binding protein 3, GTP-binding protein 3, GBP-3, Guanine nucleotide-binding protein 3, GBP3

Target/Specificity

This GBP3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 502-528 amino acids from the C-terminal region of human GBP3.

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

GBP3 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

GBP3 Antibody (C-term) - Protein Information

Name GBP3



Function Interferon (IFN)-inducible GTPase that plays important roles in innate immunity against a diverse range of bacterial, viral and protozoan pathogens (PubMed:22106366). Hydrolyzes GTP very efficiently; GDP rather than GMP is the major reaction product (By similarity). 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 AlM2 inflammasome (By similarity). Exhibits antiviral activity against influenza virus (PubMed:22106366).

Cellular Location

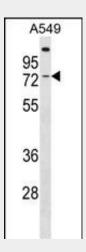
Cytoplasm. Cytoplasm, perinuclear region. Golgi apparatus membrane. Note=Heterodimers with GBP1, GBP2 and GBP5 localize in the compartment of the prenylated GBPs: with GBP1 in a vesicle-like compartment, with GBP2, around the nucleus and with GBP5, at the Golgi apparatus

GBP3 Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

GBP3 Antibody (C-term) - Images



GBP3 Antibody (C-term) (Cat. #AP18451b) western blot analysis in A549 cell line lysates (35ug/lane). This demonstrates the GBP3 Antibody detected the GBP3 protein (arrow).

GBP3 Antibody (C-term) - Background

This gene encodes a member of the guanylate-binding protein (GBP) family. GBPs specifically bind guanine nucleotides (GMP, GDP, and GTP) and contain two of the three consensus motifs





found in typical GTP-binding proteins. The encoded protein interacts with a member of the germinal center kinase family.

GBP3 Antibody (C-term) - References

Davila, S., et al. Genes Immun. 11(3):232-238(2010) Luan, Z., et al. FEBS Lett. 530 (1-3), 233-238 (2002) : Strehlow, I., et al. Gene 144(2):295-299(1994)