10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

GBP2 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20488c

Specification

GBP2 Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	P32456
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**67209**
Antigen Region	**192-220**

GBP2 Antibody (Center) - Additional Information

Gene ID 2634

Other Names
Interferon-induced guanylate-binding protein 2, GTP-binding protein 2, GBP-2, HuGBP-2, Guanine nucleotide-binding protein 2, GBP2

Target/Specificity
This GBP2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 192-220 amino acids from the Central region of human GBP2.

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
GBP2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

GBP2 Antibody (Center) - Protein Information

Name GBP2 {ECO:0000303|PubMed:8706832, ECO:0000312|HGNC:HGNC:4183}

Function Interferon (IFN)-inducible GTPase that plays important roles in innate immunity against

a diverse range of bacterial, viral and protozoan pathogens (PubMed:31091448). Hydrolyzes GTP to GMP in 2 consecutive cleavage reactions, but the major reaction product is GDP (PubMed:8706832). 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). Confers protection to the protozoan pathogen Toxoplasma gondii (By similarity). 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:31091448).

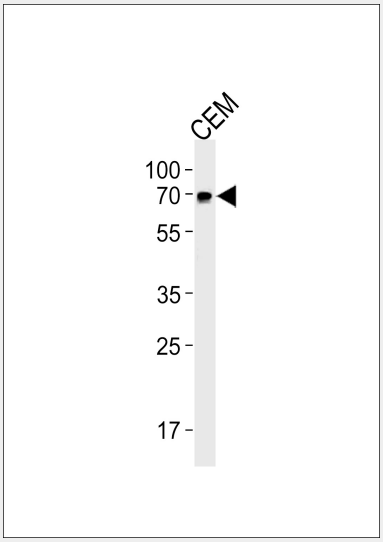
Cellular Location
Cytoplasmic vesicle membrane {ECO:0000250|UniProtKB:Q9Z0E6}; Lipid-anchor. Golgi apparatus membrane; Lipid- anchor. Cytoplasm. Cytoplasm, perinuclear region. Note=GBP2-GBP5 dimers localize to the Golgi apparatus.

GBP2 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

GBP2 Antibody (Center) - Images



GBP2 Antibody (Center) (Cat. #AP20488c) western blot analysis in CEM cell line lysates (35ug/lane).This demonstrates the GBP2 antibody detected the GBP2 protein (arrow).

GBP2 Antibody (Center) - Background

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Binds GTP, GDP and GMP. Hydrolyzes GTP very efficiently; GDP rather than GMP is the major reaction product.

GBP2 Antibody (Center) - References

Cheng Y.-S.E., et al. Mol. Cell. Biol. 11:4717-4725(1991).
Schwemmle M., et al. Submitted (SEP-1991) to the EMBL/GenBank/DDBJ databases.
Bechtel S., et al. BMC Genomics 8:399-399(2007).
Ota T., et al. Nat. Genet. 36:40-45(2004).
Ebert L., et al. Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.