

**GBP5 Antibody (C-Terminus)**  
**Rabbit Polyclonal Antibody**  
**Catalog # ALS16758****Specification**

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**GBP5 Antibody (C-Terminus) - Product Information**

Application	IHC, IF, WB
Primary Accession	<a href="#">Q96PP8</a>
Other Accession	<a href="#">115362</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	66617

**GBP5 Antibody (C-Terminus) - Additional Information****Gene ID** 115362**Other Names**

GBP5, GBP-TA antigen, GTP-binding protein 5, Guanylate binding protein 5, Guanylate-binding protein 5, GBP-5

**Target/Specificity**

GBP5 antibody is predicted to not cross-react with other GBP family members.

**Reconstitution & Storage**

PBS, 0.02% sodium azide. Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

**Precautions**

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

**GBP5 Antibody (C-Terminus) - 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:<a href="http://www.uniprot.org/citations/20180847" target="\_blank">20180847</a>). 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:<a href="http://www.uniprot.org/citations/22461501" target="\_blank">22461501</a>). 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</a>, PubMed:<a href="http://www.uniprot.org/citations/31091448" target="\_blank">31091448</a>).

#### **Cellular Location**

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

#### **Tissue Location**

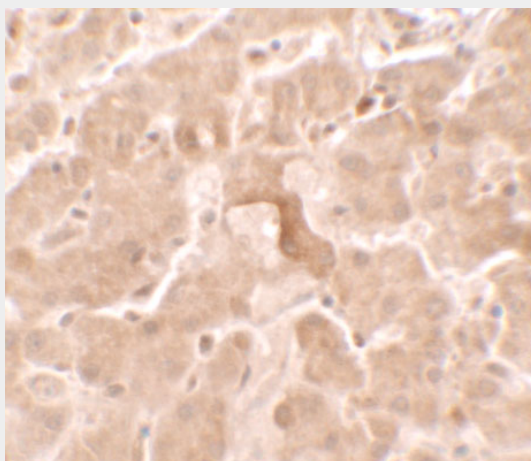
Expressed in peripheral blood monocytes (at protein level).

### **GBP5 Antibody (C-Terminus) - Protocols**

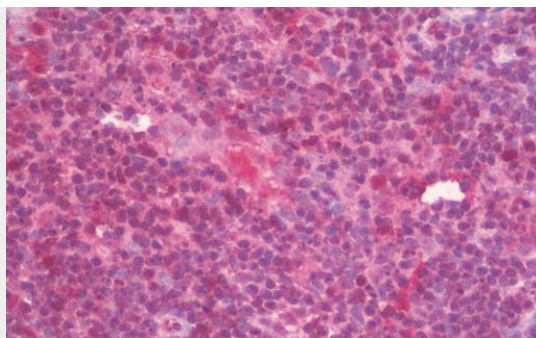
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

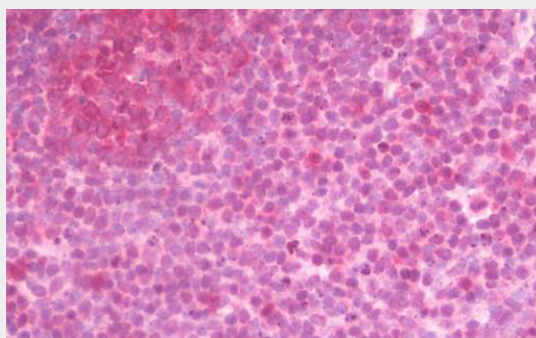
### **GBP5 Antibody (C-Terminus) - Images**



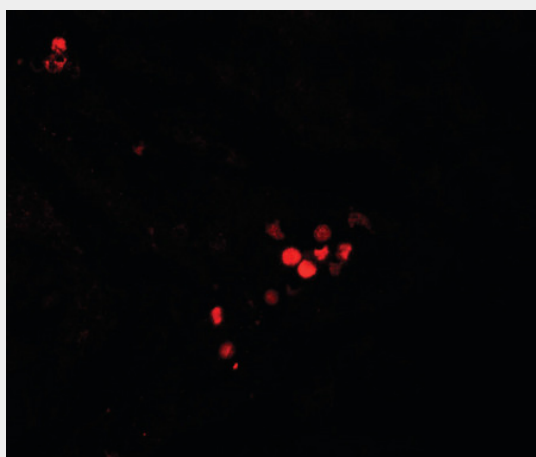
Immunohistochemistry of GBP5 in human liver tissue with GBP5 antibody at 2.5 ug/ml.



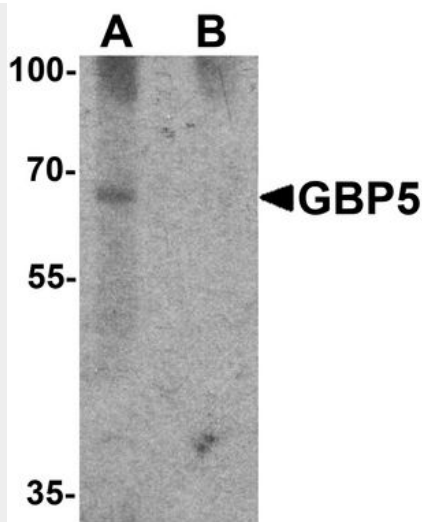
Anti-GBP5 antibody IHC staining of human thymus.



Anti-GBP5 antibody IHC staining of human tonsil.



Immunofluorescence of GBP5 in human liver tissue with GBP5 antibody at 20 ug/ml.



Western blot analysis of GBP5 in rat liver tissue lysate with GBP5 antibody at 1 ug/ml in (A)...

#### **GBP5 Antibody (C-Terminus) - Background**

Stimulates the NLRP3 inflammasome assembly upon bacterial challenge.

#### **GBP5 Antibody (C-Terminus) - References**

Avdalovic A.,et al.Submitted (JUL-2000) to the EMBL/GenBank/DDBJ databases.  
Fellenberg F.,et al.J. Invest. Dermatol. 122:1510-1517(2004).  
Clark H.F.,et al.Genome Res. 13:2265-2270(2003).  
Ota T.,et al.Nat. Genet. 36:40-45(2004).  
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.