

GBP6 Antibody

Catalog # ASC11439

Product Information

Application	WB, IF, ICC, E
Primary Accession	Q6ZN66
Other Accession	NP_940862 , 157671915
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	72427
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	GBP6 antibody can be used for detection of GBP6 by Western blot at 0.5 μ g/mL. Antibody can also be used for immunocytochemistry starting at 2.5 μ g/mL. For immunofluorescence start at 5 μ g/mL.

Additional Information

Gene ID	163351
Other Names	Guanylate-binding protein 6, GTP-binding protein 6, GBP-6, Guanine nucleotide-binding protein 6, GBP6
Target/Specificity	GBP6; GBP6 antibody is predicted to not cross-react with other GBP family members.
Reconstitution & Storage	GBP6 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	GBP6 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GBP6
Function	Interferon (IFN)-inducible GTPase that plays important roles in innate immunity against a diverse range of bacterial, viral and protozoan pathogens, such as bacterial pathogens <i>Listeria monocytogenes</i> and <i>Mycobacterium bovis</i> BCG as well as the protozoan pathogen <i>Toxoplasma gondii</i> (By similarity). Confers protection to several pathogens, including the bacterial pathogens <i>Listeria monocytogenes</i> and <i>Mycobacterium bovis</i> BCG as well as the protozoan pathogen <i>Toxoplasma gondii</i> (By similarity).

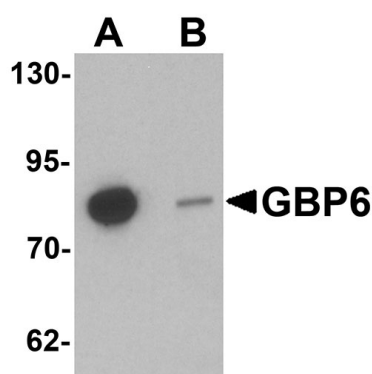
Background

GBP6 Antibody: The guanylate-binding proteins (GBPs), a family of interferon-induced GTP-binding proteins function in innate immunity against microbial and viral pathogens. In humans, there are seven GBPs from hGBP1 to hGBP7. Human GBP1 and GBP2 have been shown to exhibit antiviral activity as well as being able to regulate the inhibition of proliferation and invasion of endothelial cells in response to interferon (IFN) (1,3). GBP6 is induced by IFN and hydrolyzes GTP to both GDP and GMP. The precise function of GBP6 is still under investigation.

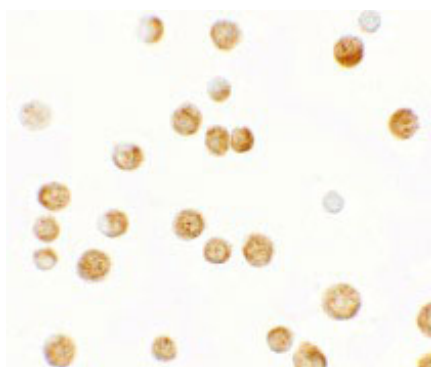
References

Vestal DJ. The guanylate-binding proteins (GBPs): proinflammatory cytokine-induced members of the dynamin superfamily with unique GTPase activity. *J. Interferon Cytokine Res.* 2005; 25:435-43.
Kresse A, Konermann C, Degrandi D, et al. Analyses of murine GBP homology clusters based on in silico, in vitro and in vivo studies. *BMC Genomics* 2008; 9:158.
Hammon M, Herrmann M, Bleiziffer O, et al. Role of guanylate binding protein-1 in vascular defects associated with chronic inflammatory diseases. *J. Cell Mol. Med.* 2011; 15:1582-92.
Olszewski MA, Gray J, and Vestal DJ. In silico genomic analysis of the human and murine guanylate-binding protein (GBP) gene clusters. *Interferon Cytokine Res.* 2006; 26:328-52.

Images

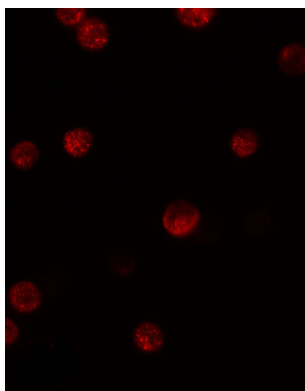


Western blot analysis of GBP6 in HeLa cell lysate with GBP6 antibody at 0.5 $\mu\text{g/mL}$ in (A) the absence and (B) the presence of blocking peptide.



Immunocytochemistry of GBP6 in HeLa cells with GBP6 antibody at 2.5 $\mu\text{g/mL}$.

Immunofluorescence of GBP6 in HeLa cells with GBP6 antibody at 5 $\mu\text{g/mL}$.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.