Rabbit GBP1 Polyclonal Antibody | anti-GBP1 antibody

Anti-GBP1 Antibody Picoband

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA19787	**Rabbit**	**Human, Mouse, Rat**	**ELISA, Flow Cytometry, Functional Assay, Immunoprecipitation, Immunofluorescence, Immunohistochemistry, Immunocytochemistry, Western Blot**

PRODUCT SYNONYMS

GBP1; Polyclonal Antibody; Anti-GBP1 Antibody Picoband; anti-GBP1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Applicable Applications for anti-GBP1 antibody	ELISA, FCM/FACS (Flow Cytometry), IP (Immunoprecipitation), IF (Immunofluorescence), IHC (Immunohistochemistry), ICC (Immunocytochemistry), WB (Western Blot)
Application Notes	WB: 0.25-0.5ug/ml, Human, Mouse, Rat IHC: 2-5ug/ml, Human, Mouse, Rat ICC/IF: 5ug/ml, Human IP: 0.5-2ug/ml, Human FC/FACS (Fixed): 1-3ug/1x10^6 cells, Human ELISA: 0.1-0.5ug/ml
Immunogen	E coli-derived human GBP1 recombinant protein (Position: E190-S592).
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.
Preparation and Storage	At -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months.Avoid repeated freezing and thawing.

IMAGES



FCM (Flow Cytometry)

Figure 7. Flow Cytometry analysis of MCF-7 cells using anti-GBP1 antibody (AAA19787).Overlay histogram showing MCF-7 cells stained with AAA19787 (Blue line). The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with rabbit anti-GBP1 Antibody (AAA19787, 1ug/1x106 cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x106) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



IP (Immunoprecipitation)

Figure 6. Immunoprecipitating GBP1 in Hela whole cell lysate .Western blot analysis of GBP1 using anti-GBP1 antibody (AAA19787).Lane 1: Hela whole cell lysates (30ug)Lane 2: Rabbit control IgG instead of anti-GBP1 antibody in Hela whole cell lysate.Lane 3: anti-GBP1 antibody (2ug) + Hela whole cell lysate (500ug)After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-GBP1 antigen affinity purified polyclonal antibody (AAA19787) at a dilution of 0.5ug/mL and probed with a goat anti-rabbit IgG-HRP secondary antibody (epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-GBP1 Antibody (AAA19787) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-GBP1 Antibody (AAA19787) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-GBP1 Antibody (AAA19787) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Lane 2: human HUVEC whole cell lysates,Lane 3: human MCF-7 whole cell lysates,Lane 4: human Hela whole cell lysates,Lane 5: rat brain tissue lysates,Lane 6: rat spleen tissue lysates,Lane 7: mouse brain tissue lysates,Lane 8: mouse spleen tissue lysayes.After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-GBP1 antigen affinity purified polyclonal antibody (#AAA19787) at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for GBP1 at approximately 68 kDa. The expected band size for GBP1 is at 68 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-GBP1 antibody	The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Product Categories/Family for anti-GBP1 antibody	Primary Antibodies
References	1. Cheng, Y.-S. E., Patterson, C. E., Staeheli, P. Interferon-induced guanylate-binding proteins lack an N(T)KXD consensus motif and bind GMP in addition to GDP and GTP. Molec. Cell. Biol. 11: 4717-4725, 1991.2. Gaudet, R. G., Zhu, S., Halder, A., Kim, B.-H., Bradfield, C. J., Huang, S., Xu, D., Maminska, A., Nguyen, T. N., Lazarou, M., Karatekin, E., Gupta, K., MacMicking, J. D. A human apolipoprotein L with detergent-like activity kills intracellular pathogens. Science 373: eabf8113, 2021.3. Ghosh, A., Praefcke, G. J. K., Renault, L., Wittinghofer, A., Herrmann, C. How guanylate-binding proteins achieve assembly-stimulated processive cleavage of GTP to GMP. Nature 440: 101-104, 2006.

NCBI AND UNIPROT INFORMATION

NCBI GI #	166706903
NCBI GeneID	2633
NCBI Accession #	NP_002044.2
NCBI GenBank Nucleotide #	NM_002053.2
UniProt Accession #	P32455; Q5T8M1; D3DT26

Molecular Weight	67,931 Da
NCBI Official Full Name	interferon-induced guanylate-binding protein 1
NCBI Official Synonym Full Names	guanylate binding protein 1, interferon-inducible
NCBI Official Symbol	GBP1
NCBI Protein Information	interferon-induced guanylate-binding protein 1; GBP-1; huGBP-1; GTP-binding protein 1; guanine nucleotide-binding protein 1; guanylate binding protein 1, interferon-inducible, 67kDa
UniProt Protein Name	Interferon-induced guanylate-binding protein 1
UniProt Gene Name	**GBP1**
UniProt Synonym Gene Names	GBP-1; HuGBP-1
UniProt Entry Name	GBP1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: https://stage.aaabiotech.com/polyclonal/gbp1-antibody-flow-cytometry-immunoprecipitation-immunofluorescence-immunohistochemistry-immunocytochemistry-western-blot-elisa/19787