

Rabbit GTPBP9/OLA1 Polyclonal Antibody | anti-GTPBP9/OLA1 antibody

Anti-GTPBP9/OLA1 Antibody Picoband

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA127426	Rabbit	Human, Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Immunofluorescence, Immunocytochemistry, Western Blot

PRODUCT SYNONYMS

GTPBP9/OLA1; Polyclonal Antibody; Anti-GTPBP9/OLA1 Antibody Picoband; Metalloproteinase inhibitor 4; fatty acid binding protein 6; Gastrotropin; GT; Fatty acid-binding protein 6; Ileal lipid-binding protein; ILBP; Intestinal 15 kDa protein; I-15P; Intestinal bile acid-binding protein; I-BABP; FABP6; ILLBP; anti-GTPBP9/OLA1 antibody

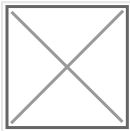
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Isoform 1 isExpressed in the jejunum, ileum, cecum and ascending colon intestine. Isoform 2 is xpressed in the gallbladder, duodenum, jejunum, ileum, cecum, ascending, transverse and descending colon, sigmoid colon and rectum. Isoform 2 isExpressed in colorectal adenocarcinomas and their adjacent normal mucosa.
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-GTPBP9/OLA1 antibody	ELISA, FCM/FACS (Flow Cytometry), IF (Immunofluorescence), ICC (Immunocytochemistry), WB (Western Blot)
Immunogen	E coli-derived human GTPBP9/OLA1 recombinant protein (Position: D8-D379).
Subcellular Localization	Cytoplasm. Membrane. Peripheral membrane protein. Cytoplasmic side
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.
Cross Reactivity	No cross-reactivity with other proteins.
Protein Function	Binds to bile acids and is involved in enterohepatic bile acid metabolism. Required for efficient apical to basolateral transport of conjugated bile acids in ileal enterocytes. In vitro binds to bile acids in the order: deoxycholic acid > cholic acid > chenodeoxycholic acid and respective BA conjugation modifies affinities in the order taurine-conjugated > glycine-conjugated > unconjugated bile acids. Stimulates gastric acid and pepsinogen secretion. Essential for the survival of colon cancer cells to bile acid-induced apoptosis.
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.



FCM/FACS (Flow Cytometry)

Figure 3. Flow Cytometry analysis of Raji cells using anti-GTPBP9/OLA1 antibody (AAA127426).Overlay histogram showing Raji cells stained with AAA127426 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-GTPBP9/OLA1 Antibody (AAA127426, 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.



WB (Western Blot)

Figure 1. Western blot analysis of GTPBP9/OLA1 using anti-GTPBP9/OLA1 antibody (AAA127426).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.Lane 1: human HepG2 whole cell lysates,Lane 2: human Jurkat whole cell lysates,Lane 3: human MCF-7 whole cell lysates,Lane 4: human PC-3 whole cell lysates,Lane 5: rat brain tissue lysates,Lane 6: rat liver tissue lysates,Lane 7: mouse brain tissue lysates,Lane 8: mouse liver tissue lysates.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-GTPBP9/OLA1 antigen affinity purified polyclonal antibody (#AAA127426) at 0.25ug/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 GTPBP9/OLA1 at approximately 45 kDa. The expected band size for GTPBP9/OLA1 is at 45 kDa.



IF (Immunofluorescence)

Figure 2. IF analysis of GTPBP9/OLA1 using anti-GTPBP9/OLA1 antibody (AAA127426).GTPBP9/OLA1 was detected in an immunocytochemical section of U2OS cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5ug/mL rabbit anti-GTPBP9/OLA1 Antibody (AAA127426) overnight at 4 degree C. Cy3 Conjugated Goat Anti-Rabbit IgG (BA1032) was used as secondary antibody at 1:500 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

ADDITIONAL INFORMATION

Related Product Information for anti-GTPBP9/OLA1 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-GTPBP9/OLA1 antibody	Primary Antibodies; Angiogenesis; Cancer; Cardiovascular; Cell Biology; ECM Enzymes; Extracellular Matrix; Invasion/Microenvironment; Protease Inhibitors; Proteolysis/Ubiquitin
References	1. Ding, Z., Liu, Y., Rubio, V., He, J., Minze, L. J., Shi, Z.-Z. OLA1, a translational regulator of p21, maintains optimal cell proliferation necessary for developmental progression. Molec. Cell. Biol. 36: 2568-2582, 2016.2. Koller-Eichhorn, R., Marquardt, T., Gail, R., Wittinghofer, A., Kostrewa, D., Kutay, U., Kambach, C. Human OLA1 defines an ATPase subfamily in the OBG family of GTP-binding proteins. J. Biol. Chem. 282: 19928-19937, 2007. [PubMed: 17430889, related citations] [Full Text]3. Scott, A. F. Personal Communication. Baltimore, Md. 6/29/2007.

NCBI AND UNIPROT INFORMATION

NCBI GI #	58761502
NCBI GeneID	29789
NCBI Accession #	NP_001011708.1
NCBI GenBank Nucleotide #	NM_001011708.1
UniProt Accession #	Q9NTK5; Q5BJD7; Q8NCI8; Q96CU1; Q96SV2; Q9P1D3; Q9UNY9; Q9Y6G4; D7EHM2
NCBI Official Full Name	obg-like ATPase 1 isoform 2

NCBI Official Synonym Full Names	Obg-like ATPase 1
NCBI Official Symbol	OLA1
NCBI Official Synonym Symbols	DOC45; GBP45; GTBP9; GTPBP9; PTD004
NCBI Protein Information	obg-like ATPase 1; DNA damage-regulated overexpressed in cancer 45 protein; GTP-binding protein 9 (putative); GTP-binding protein PTD004; OLA1; homologous yeast-44.2 protein
UniProt Protein Name	Obg-like ATPase 1
UniProt Gene Name	OLA1
UniProt Synonym Gene Names	DOC45
UniProt Entry Name	OLA1_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.

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 Online datasheet: <https://stage.aaabiotech.com/polyclonal/gtpbp9-ola1-antibody-flow-cytometry-immunofluorescence-immunocytochemistry-western-blot-elisa/127426>