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Datasheet for 600-401-BJ8

GBL Antibody

Overview

Description:	Anti-GBL (RABBIT) Antibody - 600-401-BJ8
Item No.:	600-401-BJ8
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	GbetaL (G protein beta protein subunit-like) is a member of a signaling pathway that regulates mammalian cell growth in response to the presence of nutrients and growth factors. It binds to the kinase domain of TOR (Target of rapamycin, also known as mTOR), an evolutionarily conserved serine/threonine kinase that regulates cell growth and cell cycle through its ability to integrate signals from nutrient levels and growth factors. Rapamycin inhibits TOR resulting in reduced cell growth and reduced rates of cell cycle and cell proliferation. TOR is normally associated with GbetaL and an additional regulatory protein RAPTOR, allowing TOR to control protein biosynthesis. The binding of GbetaL to TOR stimulates TOR's kinase activity towards downstream proteins such as RPS6K (ribosomal protein S6 kinase) and the translation factor 4E-BP1 which leads to increased protein translation and cell growth.
Synonyms:	GBL Antibody, GBL, LST8, POP3, WAT1, GbetaL, GBL, Target of rapamycin complex subunit LST8, G protein beta subunit-like, TORC subunit LST8
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	MLST8
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-GbL antibody was prepared from whole rabbit serum produced by repeated immunizations with a 14 amino acid synthetic peptide from near the C-terminus of human GbL.
Purity/Specificity:	Anti-GBL Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with GBL from other sources has not been determined.
Relevant Links:	• UniProtKB - Q9BVC4 • GeneID - 64223 • NCBI - AAH52292

Application Details

Tested Applications:	ELISA, IF, IHC, WB
Application Note:	Anti-GBL Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 36 kDa in Western Blots of specific cell lysates and tissues.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	1:10,000 - 1:20,000
IF:	10 µg/mL
IHC:	10 µg/mL
WB:	1-2 µg/mL

Formulation

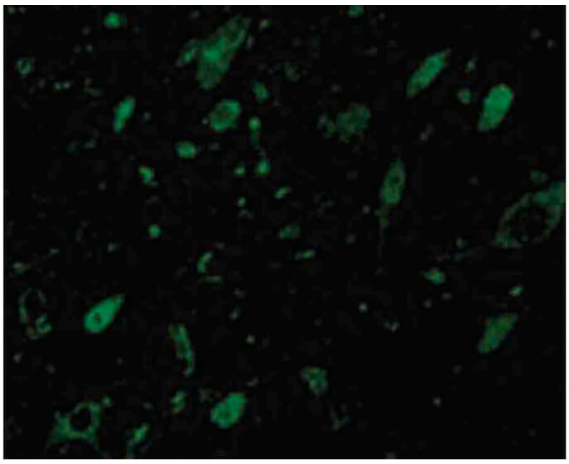
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

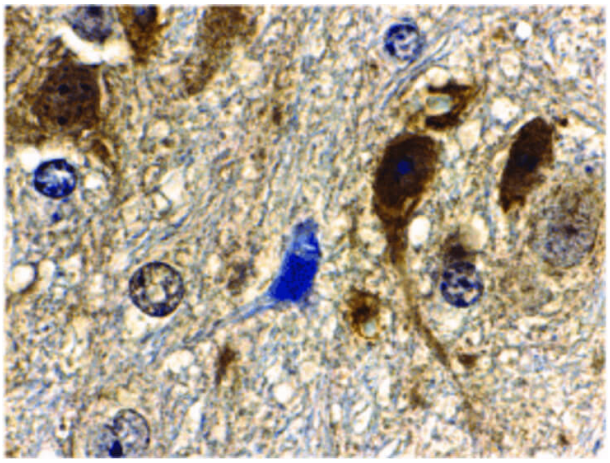
Shipping Condition:	Dry Ice

Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

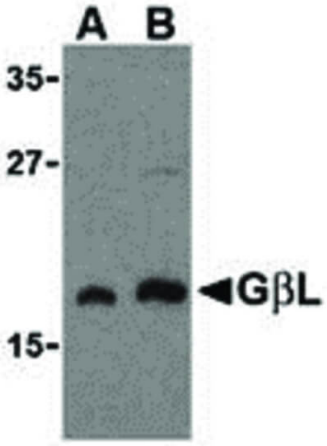
Images



Immunofluorescence Microscopy
Immunofluorescence Microscopy of GBL antibody. Cell Type: Mouse Brain cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: GBL antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: GBL is cytoplasmic. Staining: GBL as green fluorescent signal.



Immunohistochemistry
Immunohistochemistry of GBL antibody. Tissue: mouse brain tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: GBL antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: GBL is cytoplasmic. Staining: GBL is stained with hematoxylin purple nuclear counterstain.



Western Blot

Western Blot of GBL antibody in human brain cell lysate. Lane A: GBL antibody at 1 µg/mL. Lane B: GBL antibody at 2 µg/mL. Load: 35 µg per lane. Primary antibody: GBL antibody at designated concentrations for overnight at 4°C. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 36 kDa, 19 kDa for GBL. Other band(s): GBL splice variants and isoforms.

Disclaimer

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