

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:	<ul style="list-style-type: none">• 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

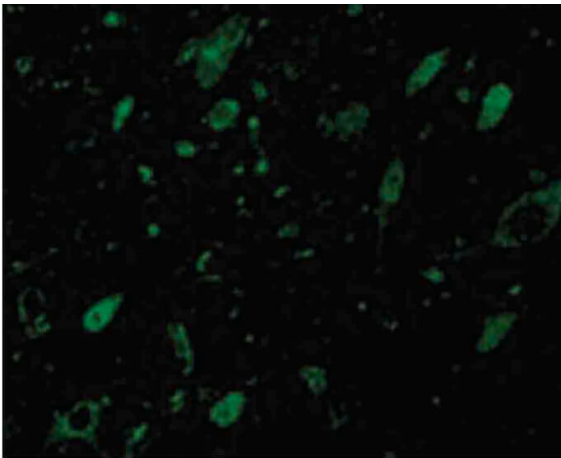
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

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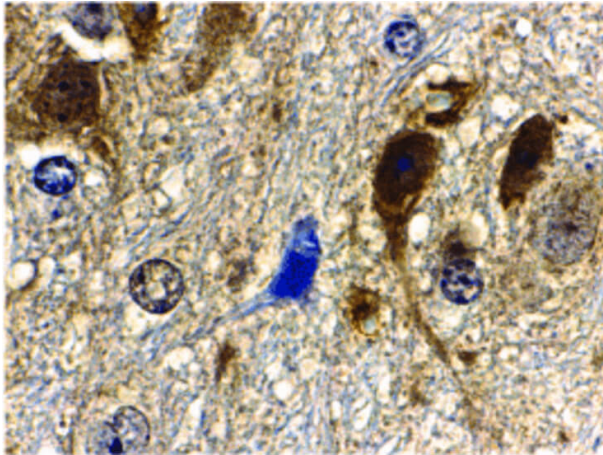
Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted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

Images



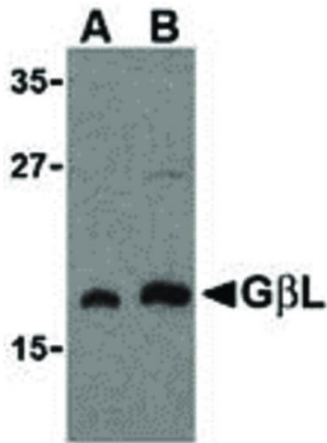
Immunofluorescence Microscopy

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 $\mu\text{g}/\text{mL}$. Lane B: GBL antibody at

2 $\mu\text{g}/\text{mL}$. 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

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.