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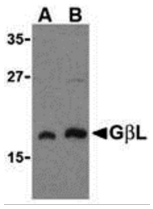
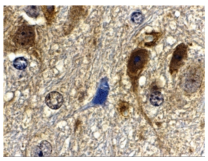
GBL Antibody

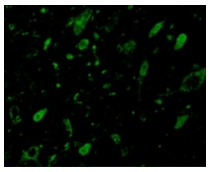
Cat. No.: 3495



GBL Antibody



Immunohistochemistry of GbL in mouse brain tissue with GbL antibody at 10 µg/mL.



Immunofluorescence of GBL in Mouse Brain cells with GBL antibody at 10 µg/mL.

Specifications

HOST SPECIES:	Rabbit
SPECIES REACTIVITY:	Human, Mouse, Rat
HOMOLOGY:	Predicted species reactivity based on immunogen sequence: Bovine: (100%)
IMMUNOGEN:	GbL antibody was raised against a 14 amino acid synthetic peptide from near the carboxy terminus of human GbL. The immunogen is located within the first 50 amino acids of GBL.
TESTED APPLICATIONS:	ELISA, IF, IHC-P, WB

APPLICATIONS:	GbL antibody can be used for the detection of GbL by Western blot at 1 and 2 µg/mL. Antibody can also be used for immunohistochemistry starting at 10 µg/mL. For immunofluorescence start at 10 µg/mL. Antibody validated: Western Blot in human samples; Immunohistochemistry in mouse samples and Immunofluorescence in mouse samples. All other applications and species not yet tested.
POSITIVE CONTROL:	1) Cat. No. 1303 - Human Brain Tissue Lysate
	2) Cat. No. 1403 - Mouse Brain Tissue Lysate

Properties

PURIFICATION:	GBL Antibody is affinity chromatography purified via peptide column.
CLONALITY:	Polyclonal
ISOTYPE:	IgG
CONJUGATE:	Unconjugated
PHYSICAL STATE:	Liquid
BUFFER:	GBL Antibody is supplied in PBS containing 0.02% sodium azide.
CONCENTRATION:	1 mg/mL
STORAGE CONDITIONS:	GBL 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.

Additional Info

OFFICIAL SYMBOL:	MLST8
ALTERNATE NAMES:	GBL Antibody: GBL, LST8, POP3, WAT1, GbetaL, GBL, Target of rapamycin complex subunit LST8, G protein beta subunit-like, TORC subunit LST8
ACCESSION NO.:	AAH52292
PROTEIN GI NO.:	30411038
GENE ID:	64223
USER NOTE:	Optimal dilutions for each application to be determined by the researcher.

Background and References

BACKGROUND:	GBL Antibody: 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.
REFERENCES:	1) Kim D-H, Sarbassov DD, Ali SM, et al. GβL, a positive regulator of the Rapamycin-sensitive pathway required for the nutrient-sensitive interaction between Raptor and mTOR. Mol. Cell 2003; 11:895-904.
	2) Shamji AF, Ngheim P, and Schreiber SL. Integration of growth factor and nutrient signaling: implications for cancer biology. Mol. Cell 2003; 12:271-80.
	3) Fingar DC and Blenis J. Target of rapamycin (TOR): an integrator of nutrient and growth factor signals and coordinator of cell growth and cell cycle progression. Oncogene 2004; 23:3151-71.