

Product datasheet for **TA302160**

G protein beta subunit like (MLST8) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 1:1000, IHC: 1:50~100
Reactivity:	Human (Predicted: Mouse, Rat, Bovine)
Host:	Rabbit
Isotype:	Ig
Clonality:	Polyclonal
Immunogen:	This GBL antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 140-170 amino acids from the Central region of human GBL.
Formulation:	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.
Purification:	This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	35876 Da
Gene Name:	MTOR associated protein, LST8 homolog
Database Link:	NP_071767 Entrez Gene 56716 Mouse Entrez Gene 64226 Rat Entrez Gene 64223 Human Q9BVC4



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Background:

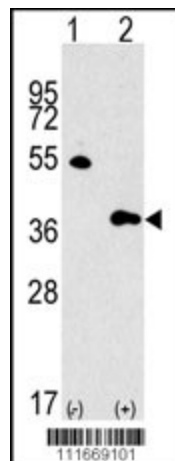
GBL (G protein beta protein subunit-like) is a member of a signaling pathway that regulates mammalian cell growth in response to the presence of nutrients and growth factors. It binds to the kinase domain of TOR (Target of rapamycin, also known as mTOR), an evolutionarily conserved serine/threonine kinase 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 GBL and an additional regulatory protein RAPTOR, allowing TOR to control protein biosynthesis. The binding of GBL 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:

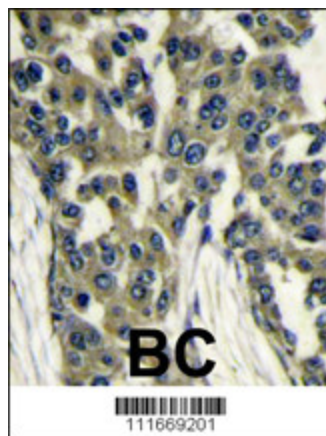
GbetaL; GBL; LST8; POP3; WAT1

Protein Pathways:

mTOR signaling pathway

Product images:

Western blot analysis of GBL Antibody (Center) polyclonal antibody (Cat.#TA302160) (arrow). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the GBL gene (Lane 2) (Origene Technologies).



Formalin-fixed and paraffin-embedded human breast carcinoma reacted with GBL antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.