



G protein beta subunit like Rabbit pAb

Catalog Number: bs-8161R

Target Protein: G protein beta subunit like

Concentration: 1mg/ml

Form: Liquid Host: Rabbit

Clonality: Polyclonal

Isotype: IgG

Applications: IHC-P (1:100-500), IHC-F (1:100-500), IF (1:100-500)

Reactivity: Rat (predicted: Human, Mouse, Pig, Sheep, Cow, Dog)

Predicted MW: 36 kDa
Entrez Gene: 64223
Swiss Prot: Q9BVC4

Source: KLH conjugated synthetic peptide derived from human G protein beta subunit like:

181-290/326.

Purification: affinity purified by Protein A

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: Subunit of both mTORC1 and mTORC2, which regulates cell growth and survival in response

to nutrient and hormonal signals. mTORC1 is activated in response to growth factors or amino-acids. Growth factor-stimulated mTORC1 activation involves a AKT1-mediated phosphorylation of TSC1-TSC2, which leads to the activation of the RHEB GTPase that potently activates the protein kinase activity of mTORC1. Amino-acid-signaling to mTORC1 requires its relocalization to the lysosomes mediated by the Ragulator complex and the Rag

GTPases. Activated mTORC1 up-regulates protein synthesis by phosphorylating key

 $regulators\ of\ mRNA\ translation\ and\ ribosome\ synthesis.\ mTORC1\ phosphorylates\ EIF4EBP1$

and releases it from inhibiting the elongation initiation factor 4E (eiF4E). mTORC1

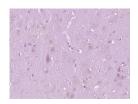
 $phosphory lates\ and\ activates\ S6K1\ at\ 'Thr-389', which\ then\ promotes\ protein\ synthesis\ by$

phosphorylating PDCD4 and targeting it for degradation.

Tissue specificity:Broadly expressed, with highest levels in skeletal muscle, heart and

kidney.

VALIDATION IMAGES



Paraformaldehyde-fixed, paraffin embedded (rat brain tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (GBL protein) Polyclonal Antibody, Unconjugated (bs-8161R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.