

HUMAN-PIK3R2(Y464) Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP21653a

Product Information

Application	WB, E
Primary Accession	O00459
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Clone Names	RB48985
Calculated MW	81545

Additional Information

Gene ID	5296
Other Names	Phosphatidylinositol 3-kinase regulatory subunit beta, PI3-kinase regulatory subunit beta, PI3K regulatory subunit beta, PtdIns-3-kinase regulatory subunit beta, Phosphatidylinositol 3-kinase 85 kDa regulatory subunit beta, PI3-kinase subunit p85-beta, PtdIns-3-kinase regulatory subunit p85-beta, PIK3R2
Target/Specificity	This antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 430-470 amino acids from human.
Dilution	WB~~1:2000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	HUMAN-PIK3R2(Y464) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PIK3R2
Function	Regulatory subunit of phosphoinositide-3-kinase (PI3K), a kinase that phosphorylates PtdIns(4,5)P ₂ (Phosphatidylinositol 4,5- biphosphate) to generate phosphatidylinositol 3,4,5-trisphosphate (PIP ₃). PIP ₃ plays a key role by recruiting PH domain-containing proteins to the membrane, including

AKT1 and PDPK1, activating signaling cascades involved in cell growth, survival, proliferation, motility and morphology. Binds to activated (phosphorylated) protein- tyrosine kinases, through its SH2 domain, and acts as an adapter, mediating the association of the p110 catalytic unit to the plasma membrane. Indirectly regulates autophagy (PubMed:[23604317](#)). Promotes nuclear translocation of XBP1 isoform 2 in a ER stress- and/or insulin- dependent manner during metabolic overloading in the liver and hence plays a role in glucose tolerance improvement (By similarity).

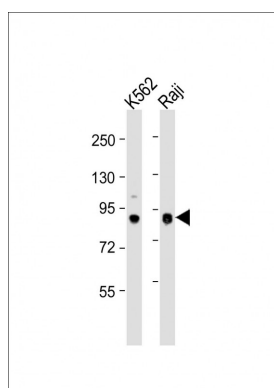
Background

Regulatory subunit of phosphoinositide-3-kinase (PI3K), a kinase that phosphorylates PtdIns(4,5)P₂ (Phosphatidylinositol 4,5-bisphosphate) to generate phosphatidylinositol 3,4,5- trisphosphate (PIP₃). PIP₃ plays a key role by recruiting PH domain-containing proteins to the membrane, including AKT1 and PDPK1, activating signaling cascades involved in cell growth, survival, proliferation, motility and morphology. Binds to activated (phosphorylated) protein-tyrosine kinases, through its SH2 domain, and acts as an adapter, mediating the association of the p110 catalytic unit to the plasma membrane. Indirectly regulates autophagy (PubMed:[23604317](#)). Promotes nuclear translocation of XBP1 isoform 2 in a ER stress- and/or insulin- dependent manner during metabolic overloading in the liver and hence plays a role in glucose tolerance improvement (By similarity).

References

Volinia S.,et al.Oncogene 7:789-793(1992).
Janssen J.W.G.,et al.Oncogene 16:1767-1772(1998).
Grimwood J.,et al.Nature 428:529-535(2004).
Braunger J.,et al.Oncogene 14:2619-2631(1997).
Igarashi K.,et al.Biochem. Biophys. Res. Commun. 246:95-99(1998).

Images



All lanes : Anti-PIK3R2 Antibody (Y464) at 1:2000 dilution
Lane 1: K562 whole cell lysate Lane 2: Raji whole cell lysate
Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 82 kDa
Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.