

PIK3R5 Rabbit pAb

Catalog # AP100231

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q8WYR1
Other Accession	Q8WYR1
Reactivity	Human, Mouse
Predicted	Rat, Pig, Rabbit, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	97348
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human PIK3R5
Epitope Specificity	701-800/880
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBUNIT	Heterodimer of a catalytic subunit (PIK3CG/p120) and a regulatory (PIK3R5a/p101) subunit. Interacts with beta-gamma G protein dimers.
DISEASE	Ataxia-oculomotor apraxia 3 (AOA3) [MIM:615217]: An autosomal recessive disease characterized by cerebellar ataxia, oculomotor apraxia, areflexia and peripheral neuropathy. Note=The disease is caused by mutations affecting the gene represented in this entry.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Phosphatidylinositol 3-kinases (PI3Ks) phosphorylate the inositol ring of phosphatidylinositol at the 3-prime position, and play important roles in cell growth, proliferation, differentiation, motility, survival and intracellular trafficking. The PI3Ks are divided into three classes: I, II and III, and only the class I PI3Ks are involved in oncogenesis. This gene encodes the 101 kD regulatory subunit of the class I PI3K gamma complex, which is a dimeric enzyme, consisting of a 110 kD catalytic subunit gamma and a regulatory subunit of either 55, 87 or 101 kD. This protein recruits the catalytic subunit from the cytosol to the plasma membrane through high-affinity interaction with G-beta-gamma proteins. Multiple alternatively spliced transcript variants encoding two distinct isoforms have been found. [provided by RefSeq, Oct 2011]

Additional Information

Gene ID	23533
Other Names	F730038I15Rik; FOAP-2; P101-PI3K; p101; Foap2; RGD1563261; PI3R5_HUMAN; PIK3R5; PI3-kinase regulatory subunit 5; PI3-kinase p101 subunit; Phosphatidylinositol 4, 5-bisphosphate 3-kinase regulatory subunit (PtdIns-3-kinase regulatory subunit); Protein FOAP-2; PtdIns-3-kinase p101;

PI3R5_MOUSE; phosphoinositide-3-kinase regulatory subunit 5;
phosphoinositide-3-kinase, regulatory subunit 5

Dilution

IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name

PIK3R5

Function

Regulatory subunit of the PI3K gamma complex. Required for recruitment of the catalytic subunit to the plasma membrane via interaction with beta-gamma G protein dimers. Required for G protein- mediated activation of PIK3CG (By similarity).

Cellular Location

Nucleus {ECO:0000250|UniProtKB:O02696}. Cytoplasm {ECO:0000250|UniProtKB:O02696}. Cell membrane {ECO:0000250|UniProtKB:O02696}; Peripheral membrane protein {ECO:0000250|UniProtKB:O02696}. Note=Predominantly localized in the nucleus in absence of PIK3CG/p120. Colocalizes with PIK3CG/p120 in the cytoplasm. Translocated to the plasma membrane in a beta-gamma G protein-dependent manner. {ECO:0000250|UniProtKB:O02696}

Tissue Location

Ubiquitously expressed with high expression in fetal brain compared to adult brain. Abundant expression is observed in cerebellum, cerebral cortex, cerebral meninges, and vermis cerebelli

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