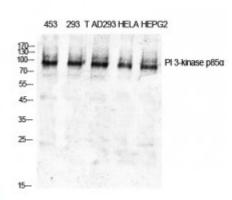


## Anti-PI 3-kinase p8 alpha antibody





**Description** Rabbit polyclonal to PI 3-kinase p85alpha.

Model STJ95077

**Host** Rabbit

**Reactivity** Human, Mouse, Rat

**Applications** ELISA, IF, IHC

**Immunogen** Synthesized peptide derived from human PI 3-kinase p85alpha around the

non-phosphorylation site of Y607.

**Immunogen Region** 550-630 aa

**Gene ID** <u>5295</u>

Gene Symbol PIK3R1

**Dilution range** IHC 1:100-1:300IF 1:200-1:1000ELISA 1:5000

**Specificity** PI 3-kinase p85alpha Polyclonal Antibody detects endogenous levels of PI 3-

kinase p85alpha protein.

**Tissue Specificity** Isoform 2 is expressed in skeletal muscle and brain, and at lower levels in

kidney and cardiac muscle. Isoform 2 and isoform 4 are present in skeletal

muscle (at protein level).

**Purification** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

**Note** For Research Use Only (RUO).

**Protein Name** Phosphatidylinositol 3-kinase regulatory subunit alpha PI3-kinase regulatory

subunit alpha PI3K regulatory subunit alpha PtdIns-3-kinase regulatory

subunit alpha Phosphatidylinositol 3-kinase 85 kDa regulatory subunit alpha P

Molecular Weight 85 kDa

**Clonality** Polyclonal

**Conjugation** Unconjugated

**Isotype** IgG

**Formulation** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

**Concentration** 1 mg/ml

**Storage Instruction** Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links HGNC:8979OMIM:171833

Alternative Names Phosphatidylinositol 3-kinase regulatory subunit alpha PI3-kinase regulatory

subunit alpha PI3K regulatory subunit alpha PtdIns-3-kinase regulatory subunit alpha Phosphatidylinositol 3-kinase 85 kDa regulatory subunit alpha P

**Function** Binds to activated (phosphorylated) protein-Tyr kinases, through its SH2

domain, and acts as an adapter, mediating the association of the p110 catalytic unit to the plasma membrane. Necessary for the insulin-stimulated increase in glucose uptake and glycogen synthesis in insulin-sensitive tissues. Plays an important role in signaling in response to FGFR1, FGFR2, FGFR3, FGFR4, KITLG/SCF, KIT, PDGFRA and PDGFRB. Likewise, plays a role in ITGB2 signaling . Modulates the cellular response to ER stress by promoting 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.

**Sequence and Domain Family** The SH3 domain mediates the binding to CBLB, and to HIV-1 Nef.

Post-translational Modifications Polyubiquitinated in T-cells by CBLB; which does not promote proteasomal degradation but impairs association with CD28 and CD3Z upon T-cell activation. Phosphorylated. Tyrosine phosphorylated in response to signaling by FGFR1, FGFR2, FGFR3 and FGFR4. Phosphorylated by CSF1R. Phosphorylated by ERBB4. Phosphorylated on tyrosine residues by TEK/TIE2. Dephosphorylated by PTPRJ. Phosphorylated by PIK3CA at Ser-608; phosphorylation is stimulated by insulin and PDGF. The relevance of phosphorylation by PIK3CA is however unclear. Phosphorylated in response to KIT and KITLG/SCF. Phosphorylated by FGR.