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PI3 Kinase p85 beta Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AP52796

Product Information

Application	WB
Primary Accession	O00459
Reactivity	Human, Mouse
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	81545

Additional Information

Gene ID	5296
Other Names	p85; p85 beta; p85-BETA; P85B; P85B_HUMAN; Phosphatidylinositol 3 kinase; Phosphatidylinositol 3 kinase regulatory beta subunit; Phosphatidylinositol 3 kinase regulatory subunit beta; Phosphatidylinositol 3 kinase regulatory subunit polypeptide 2; Phosphatidylinositol 3 kinase, regulatory subunit, polypeptide 2 (p85 beta); Phosphatidylinositol 3-kinase 85 kDa regulatory subunit beta; phosphatidylinositol 3-kinase; Phosphatidylinositol 3-kinase regulatory beta subunit; Phosphatidylinositol 3-kinase regulatory subunit beta; Phosphoinositide 3 kinase regulatory subunit 2 (beta); Phosphoinositide 3 kinase regulatory subunit 2; Phosphoinositide 3 kinase regulatory subunit polypeptide 2 (p85 beta); Phosphoinositide 3 kinase regulatory subunit polypeptide 2; Phosphoinositide 3 kinase, regulatory subunit 2 (beta); Phosphoinositide 3 kinase, regulatory subunit 2 (p85 beta); PI3 kinase p85 beta subunit; PI3 kinase p85 subunit beta; PI3-kinase regulatory subunit beta; PI3-kinase subunit p85-beta; PI3K; PI3K regulatory subunit beta; PIK3R 2; PIK3R2; polypeptide 2 (p85 beta); PtdIns 3 kinase p85 beta; PtdIns-3-kinase p85-beta; PtdIns-3-kinase regulatory subunit beta; PtdIns-3-kinase regulatory subunit p85-beta.
Dilution	WB~~1:1000
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide, pH 7.3.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

Name	PIK3R2

Function	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).

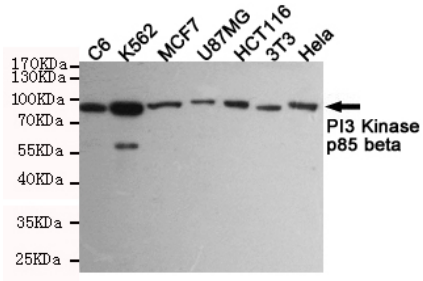
Background

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



Western blot detection of PI3 Kinase p85 beta in C6,K562,MCF7,U87MG,HCT116,3T3 and Hela cell lysates using PI3 Kinase p85 beta mouse mAb (1:1000 diluted).Predicted band size:85KDa.Observed band size:85KDa.

Citations

- Impact of Hepatoma-Derived Growth Factor Blockade on Resiniferatoxin-Induced Neuropathy
- TEEG Induced A549 Cell Autophagy by Regulating the PI3K/AKT/mTOR Signaling Pathway.

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