
Product Name: KD-Validated PI3 Kinase p110 Beta Recombinant Rabbit Monoclonal Antibody**Catalog #: KVA00547**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 122.8kDa

Antigen Information

Gene Name	PIK3CB Phosphatidylinositol-4,5-Bisphosphate 3-Kinase; Catalytic SubunitBeta; PI3K; PIK3C1; PI3KBETA; Phosphoinositide-3-Kinase; Catalytic; Beta Polypeptide; Phosphatidylinositol 4,5-Bisphosphate 3-Kinase Catalytic Subunit Beta Isoform; Phosphatidylinositol 4,5-Bisphosphate 3-Kinase 110 KDa Catalytic Subunit Beta; Phosphatidylinositol-4,5-Bisphosphate 3-Kinase 110 KDa Catalytic Subunit Beta; PtdIns-3-Kinase Subunit Beta; PI3-Kinase P110 Subunit Beta; PtdIns-3-Kinase Subunit P110-Beta; PtdIns-3-Kinase P110; PI3K-beta; PI3Kbeta; PI3-Kinase Subunit Beta; p110beta; EC 2.7.1.153; PI3KCB; P110BETA; EC 2.7.1
Alternative Names	
Gene ID	5291.0
SwissProt ID	P42338

Immunogen

A synthesized peptide derived from human PI3 Kinase p110 beta

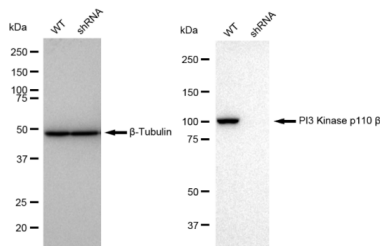
Background

This gene encodes an isoform of the catalytic subunit of phosphoinositide 3-kinase (PI3K). These kinases are important in signaling pathways involving receptors on the outer membrane of eukaryotic cells and are named for their catalytic subunit. The encoded protein is the catalytic subunit for PI3Kbeta (PI3KB). PI3KB has been shown to be part of the activation pathway in neutrophils which have bound immune complexes at sites of injury or infection. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Dec 2011]

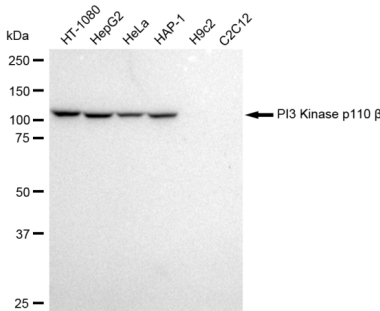
Research Area

Cell Biology,Signal Transduction,Immunology,Neuroscience

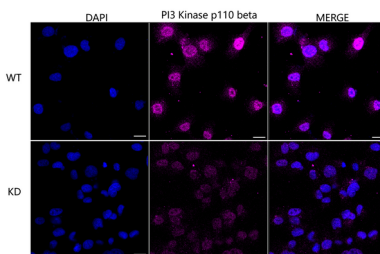
Image Data



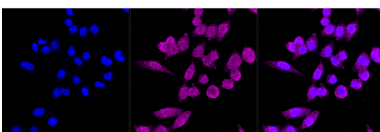
Western blotting analysis using PI3 Kinase p110 beta antibody (KVA00547). PI3 Kinase p110 beta expression in wild type (WT) and PI3 Kinase p110 beta shRNA knockdown (KD) HT-1080 cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with PI3 Kinase p110 beta antibody (KVA00547, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



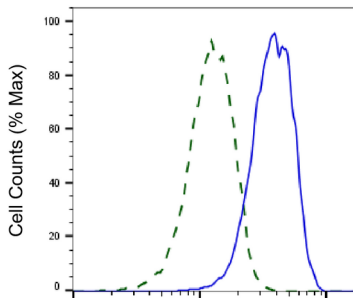
Western blotting analysis using PI3 Kinase p110 beta antibody (KVA00547). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with PI3 Kinase p110 beta antibody (KVA00547, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HT-1080 cells using PI3 Kinase p110 beta antibody (KVA00547, 1:1,000). Top panel: wild-type (WT); Bottom panel: PI3 Kinase p110 beta shRNA knockdown (KD). Nuclei were stained blue with DAPI; PI3 Kinase p110 beta was stained magenta with Alexa Fluor® 647. Scale bar, 20 µm.

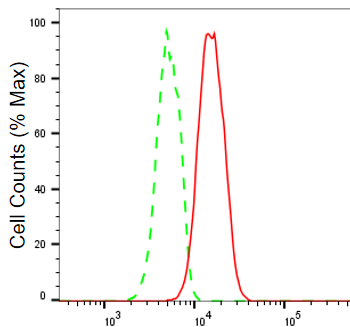


Immunocytochemical staining of HepG2 cells with PI3 Kinase p110 beta antibody (KVA00547, 1:1,000). Nuclei were stained blue with DAPI; PI3 Kinase p110 beta was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 µm.



PI3 Kinase p110 beta-Alexa Fluor® 647

Validation of PI3 Kinase p110 beta knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HT-1080 cells were stained with PI3 Kinase p110 beta antibody (KVA00547, 1:2,000) and analyzed using BD flow cytometer.



PI3 Kinase p110 beta-Alexa Fluor® 647

Flow cytometric analysis of PI3 Kinase p110 beta expression in HT-1080 cells using PI3 Kinase p110 beta antibody (KVA00547, 1:2,000). Green, isotype control; red, PI3 Kinase p110 beta.