

# **Catalog #: 64311**

#### **Aliases**

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

# **Background**

Gene Name: PIK3CB NCBI Gene Entry: 5291 UniProt Entry: P42338

# **Application Information**

Molecular Weight: Predicted, 123 kDa, observed, 110 kDa

Clonality: Rabbit monoclonal antibody

Clone ID: 23GB1035

Species Reactivity: Human

Applications Tested: Western blotting (WB), flow cytometry (FCM), immunocytochemistry (IC)

## **Immunogen**

A synthesized peptide derived from human PI3 Kinase p110 beta

# **Isotype**

Rabbit IgG

# **Storage Buffer**

Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.

# **Storage**

Store at -20 °C for one year.

#### **Recommended Dilutions**

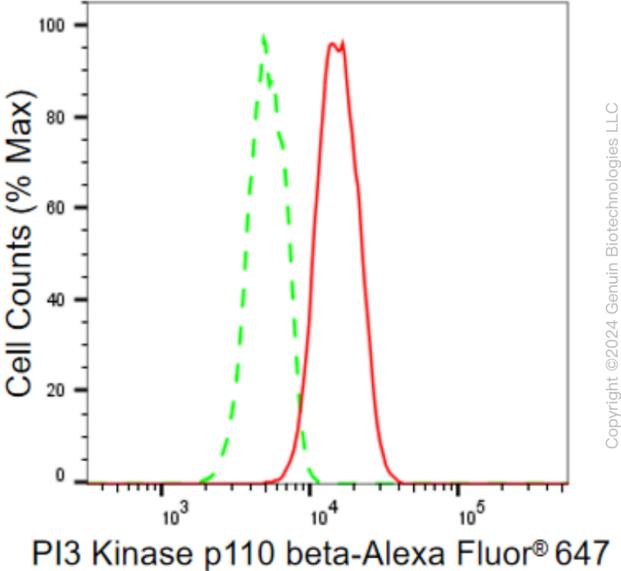
Western Blotting (WB): 1:1,000-1:5,000

Flow Cytometry (FCM): 1:2,000

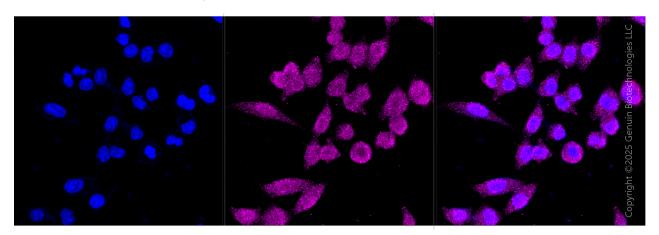
Immunocytochemistry (IC): 1:100-1:1,000

**Note:** This product is for research use only.

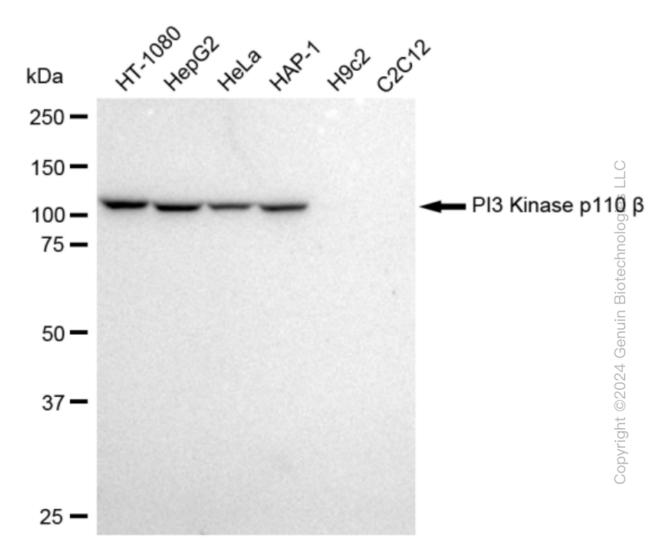
#### **Validation Data**



Flow cytometric analysis of PI3 Kinase p110 beta expression in HT-1080 cells using PI3 Kinase p110 beta antibody (Cat#64311, 1:2,000). Green, isotype control; red, PI3 Kinase p110 beta.

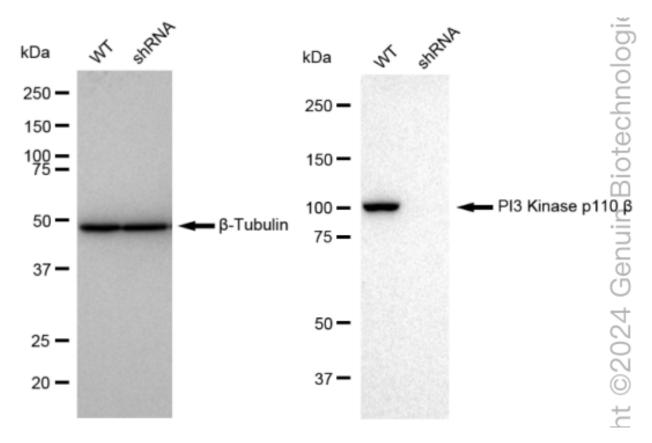


Immunocytochemical staining of HepG2 cells with anti-PI3 Kinase p110 beta antibody (Cat#64311, 1:1,000). Nuclei were stained blue with DAPI; PI3 Kinase p110 beta was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 µm.

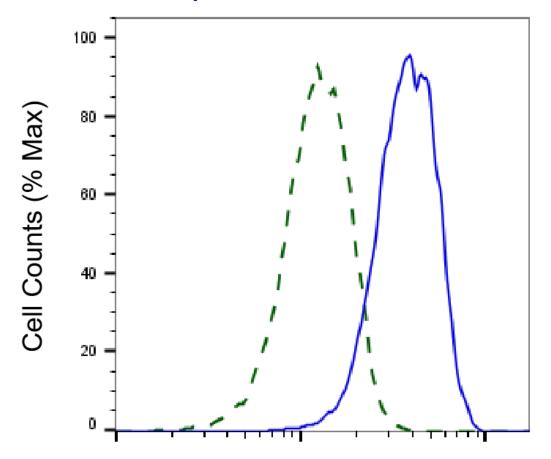


Western blotting analysis using anti-PI3 Kinase p110 beta antibody (Cat#64311). Total cell lysates

(30  $\mu$ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-PI3 Kinase p110 beta antibody (Cat#64311, 1:5,000) and HRP-conjugated goat antirabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using FeQ<sup>TM</sup> ECL Substrate Kit (Cat#226).

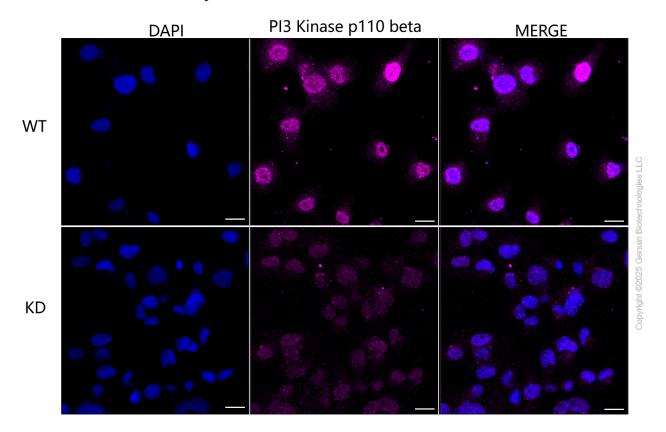


Western blotting analysis using anti-PI3 Kinase p110 beta antibody (Cat#64311). PI3 Kinase p110 beta expression in wild type (WT) and PI3 Kinase p110 beta shRNA knockdown (KD) HT-1080 cells with 30  $\mu$ g of total cell lysates.  $\beta$ -Tubulin serves as a loading control. The blot was incubated with anti-PI3 Kinase p110 beta antibody (Cat#64311, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using FeQ<sup>TM</sup> ECL Substrate Kit (Cat#226).



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 anti-PI3 Kinase p110 beta antibody (Cat#64311, 1:2,000) and analyzed using BD flow cytometer.



Immunocytochemical staining of HT-1080 cells using anti-PI3 Kinase p110 beta antibody (Cat#64311, 1:1,000), Top panel: wild-type (WT); Bottom panal: 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  $\mu$ m.