# [KD Validated] Anti-PIK3CB Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

Catalog # R020620

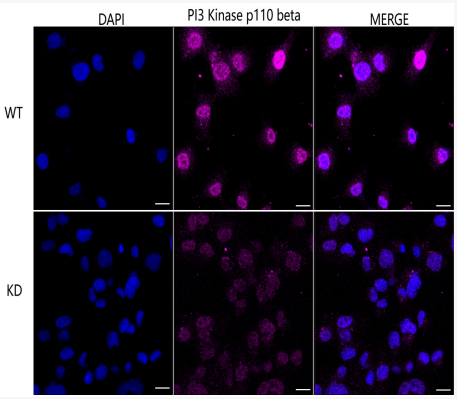
## Product Information

| | |
|---|---|
| Application | WB, FC, IF (Cell)/ICC |
| Reactivity | Human |
| Dilution | WB 1:1,000~1:5,000; FC 1:200~1:2,000; IF 1:100~1:1,000 |
| Host | Rabbit |
| Clonality | Monoclonal |
| Clone No. | 72N66Q59 |
| Isotype | IgG |
| Label | Unconjugated |
| Immunogen | A synthesized peptide derived from human PI3 Kinase p110 beta |
| Format | Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3. |
| Storage | Shipped on wet ice. Store at -20°C. Stable for 12 months from date of receipt. Aliquoting is unnecessary for -20°C storage. |
| Precautions | [KD Validated] Anti-PIK3CB Rabbit mAb [72N66Q59] is for research use only and not for use in diagnostic or therapeutic procedures. |

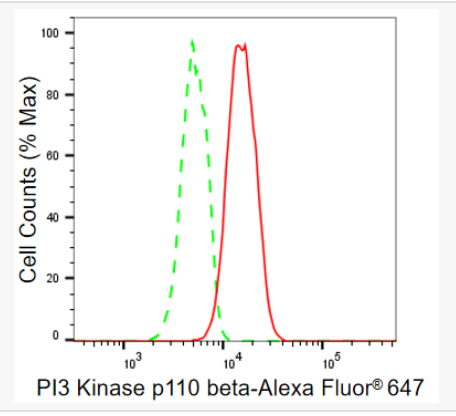
## Protein Information

| | |
|---|---|
| Synonyms | 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. |
| Calculated MW | Calculated MW: 123 kDa, Observed MW: 110 kDa |
| Uniprot ID | P42338 |
| Gene ID | 5291 |
| Background | Phosphoinositide 3-kinase (PI3K) catalyzes the production of phosphatidylinositol-3,4,5-triphosphate by phosphorylating phosphatidylinositol (PI), phosphatidylinositol-4-phosphate (PIP) and phosphatidylinositol-4,5-bisphosphate (PIP2). Growth factors and hormones trigger this phosphorylation event, which in turn coordinates cell growth, cell cycle entry, cell migration, and cell survival. |

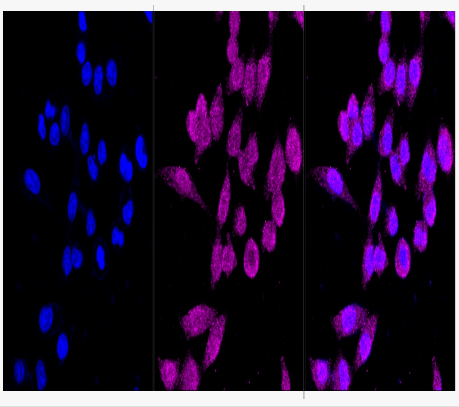
## Validation Images



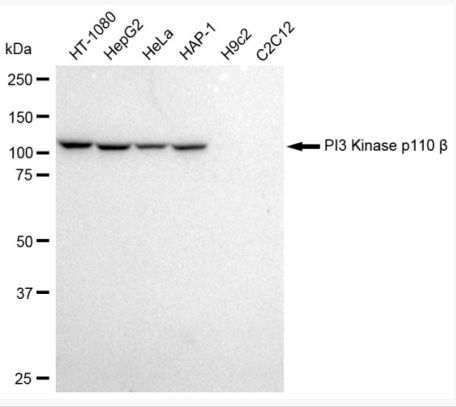

Immunocytochemical staining of HT-1080 cells using PI3 Kinase p110 beta antibody (R020620, 1:1,000), Top panel: wild-type (WT); Bottom panal: PI3 Kinase p110 beta shRNA knockdown (KD). Nuclei were stained blue with DAPI; PI3 Kinase p110 beta was stained magenta with Alexa Fluor® 647. Scale bar, 20 µm.



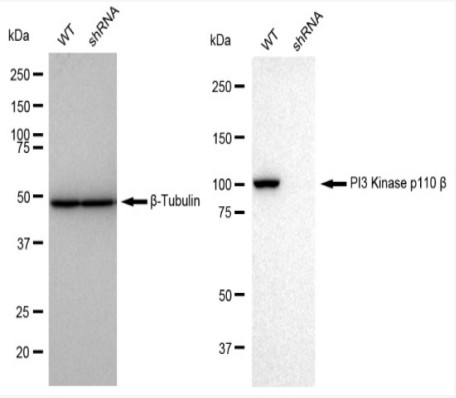

Flow cytometric analysis of PI3 Kinase p110 beta expression in HT-1080 cells using PI3 Kinase p110 beta antibody (R020620, 1:2,000). Green, isotype control; red, PI3 Kinase p110 beta.



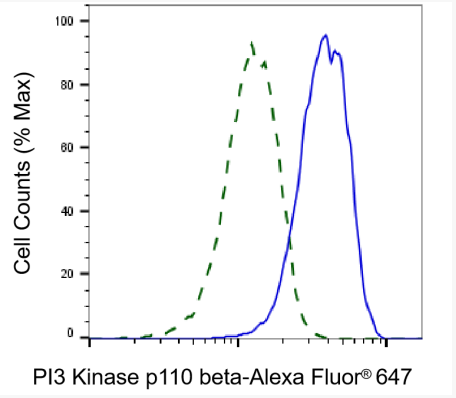
Immunocytochemical staining of HepG2 cells with PI3 Kinase p110 beta antibody (R020620, 1:1,000) . Nuclei were stained blue with DAPI; PI3 Kinase p110 beta was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 µm.




Western blotting analysis using PI3 Kinase p110 beta antibody (R020620). 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 (R020620, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.




Western blotting analysis using PI3 Kinase p110 beta antibody (R020620). 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 (R020620, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.




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 (R020620, 1:2,000) and analyzed using BD flow cytometer.