

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human PI 3-Kinase p85 $\beta$ in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human (rh) PI 3-Kinase p85 $\beta$ (aa 325-428), rhPI 3-Kinase p85 $\alpha$ , rhPI 3-Kinase p87, rhPIK3R4, or rhPIK3R5 is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 572001
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human PI 3-Kinase p85 $\beta$ Lys516-Gly642 Accession # O00459
<b>Formulation</b>	Lyophilized from a 0.2 $\mu$ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 $\mu$ m filtered solution in PBS.

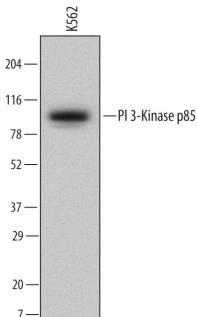
## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	Recommended Concentration	Sample
<b>Western Blot</b>	2 $\mu$ g/mL	See Below
<b>Immunocytochemistry</b>	8-25 $\mu$ g/mL	See Below

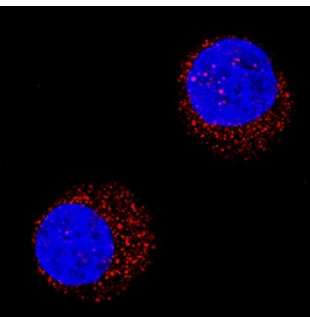
## DATA

**Western Blot**



**Detection of Human PI 3-Kinase p85 $\beta$  by Western Blot.**  
Western blot shows lysates of K562 human chronic myelogenous leukemia cell line. PVDF Membrane was probed with 2  $\mu$ g/mL of Mouse Anti-Human PI 3-Kinase p85 $\beta$  Monoclonal Antibody (Catalog # MAB6777) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for PI 3-Kinase p85 $\beta$  at approximately 100 kDa (as indicated). This experiment was conducted under reducing conditions and using [Immunoblot Buffer Group 1](#).

**Immunocytochemistry**



**PI 3-Kinase p85 $\beta$  in K562 Human Cell Line.** PI 3-Kinase p85 $\beta$  was detected in immersion fixed K562 human chronic myelogenous leukemia cell line using Mouse Anti-Human PI 3-Kinase p85 $\beta$  Monoclonal Antibody (Catalog # MAB6777) at 8  $\mu$ g/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for [Fluorescent ICC Staining of Non-adherent Cells](#).

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.5 mg/mL.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

Phosphoinositide 3-kinase p85 beta subunit (PI 3-Kinase p85 $\beta$ ), also called regulatory subunit 2 (PIK3-R2) is an 85 kDa, 728 amino acid (aa) regulatory subunit of the PI3K complex. It shares ubiquitous expression and overlapping function with the p85 alpha subunit, but the two are differentially phosphorylated and may have different effects on apoptosis. Within aa 516-642, human p85 $\beta$  shares 97%, 96% and 68% aa identity with mouse and rat p85 $\beta$  and human p85 $\alpha$ , respectively. Full-length human p85 $\alpha$  and p85 $\beta$  share 59% aa identity.