

## DESCRIPTION

<b>Species Reactivity</b>	Human/Mouse/Rat
<b>Specificity</b>	Detects human, mouse and rat PI 3-Kinase p85 $\alpha$ in Western blots.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 572106
<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 $\alpha$ aa Lys519-Gly644 Accession # P27986
<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.

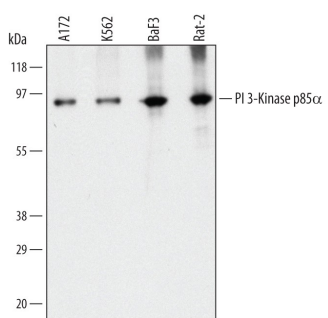
## APPLICATIONS

**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>	1 $\mu$ g/mL	See Below
<b>Simple Western</b>	10 $\mu$ g/mL	See Below

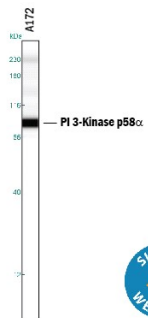
## DATA

**Western Blot**



**Detection of Human/Mouse/Rat PI 3-Kinase p85 $\alpha$  by Western Blot.** Western blot shows lysates of A172 human glioblastoma cell line, K562 human chronic myelogenous leukemia cell line, BaF3 mouse pro-B cell line, and Rat-2 rat embryonic fibroblast cell line. PVDF membrane was probed with 1  $\mu$ g/mL of Mouse Anti-Human/Mouse/Rat PI 3-Kinase p85 $\alpha$  Monoclonal Antibody (Catalog # MAB2998) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for PI 3-Kinase p85 $\alpha$  at approximately 85 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

**Simple Western**



**Detection of Human PI 3-Kinase p85 $\alpha$  by Simple Western™.** Simple Western lane view shows lysates of A172 human glioblastoma cell line, loaded at 0.2 mg/mL. A specific band was detected for PI 3-Kinase p85 $\alpha$  at approximately 89 kDa (as indicated) using 10  $\mu$ g/mL of Mouse Anti-Human/Mouse/Rat PI 3-Kinase p85 $\alpha$  Monoclonal Antibody (Catalog # MAB2998). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system. Non-specific interaction with the 230 kDa Simple Western standard may be seen with this antibody.

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<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

PI 3-Kinases phosphorylate the inositol ring on a variety of membrane-associated phosphatidylinositols. Class I phosphoinositide 3-kinases (PI 3-Kinases) are heterodimeric proteins that consist of a catalytic subunit of 110-120 kDa and an associated regulatory subunit. p85 $\alpha$  is one of the regulatory subunits that associate with the class IA PI 3-Kinases. Composed of one SH3 and two SH2 domains, p85 $\alpha$  functions as an adaptor, coupling catalytic p110 to activated receptor tyrosine kinases.