Human/Mouse/Rat PI 3-Kinase p55γ Antibody

Monoclonal Mouse IgG_{2B} Clone # 668619

Catalog Number: MAB6638

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse, and rat PI 3-Kinase p55γ in Western blots. In direct ELISAs, less than 10% cross-reactivity with recombinant human (rh) PIK3R1 (aa 519-644) and no cross-reactivity with rhPIK3R1 (aa 328-431), rhPIK3R2 (aa 325-428), rhPIK3R2 (aa 516-642), rhPIK3C3 (aa 419-887), rhPIK3R4 (aa 58-230), or rhPIK3R5 (aa 530-726) is observed.
Source	Monoclonal Mouse IgG_{2B} Clone # 668619
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	*E. coli*-derived recombinant human p55 γ Lys251-Gly378 Accession # Q92569
Formulation	Lyophilized from a 0.2 μm 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 μm filtered solution in PBS.

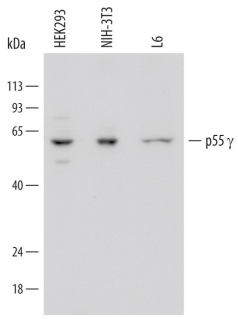
APPLICATIONS

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
Western Blot	1 µg/mL	See Below

DATA

Western Blot



Detection of Human, Mouse, and Rat PI 3-Kinase p55γ by Western Blot. Western blot shows lysates of HEK293 human embryonic kidney cell line, NIH-3T3 mouse embryonic fibroblast cell line, and L6 rat myoblast cell line. PVDF Membrane was probed with 1 µg/mL of Human/Mouse/Rat PI 3-Kinase p55γ Monoclonal Antibody (Catalog # MAB6638) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for p55γ at approximately 55 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
Shipping	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
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

p55 γ (Protein of 55 kDa, gamma subunit; also PI3-kinase regulatory subunit gamma and p55PIK) is a 55-57 kDa member of the PI3K p85 family of regulatory subunits. It is widely expressed, and serves as a recruitment subunit for the p110 catalytic subunit of PI3 kinase. p55 γ/p55PIK should not be confused with the 55 kDa alpha splice variant of the p85a gene (75% amino acid [aa] identity). Human p55 γ is 461 aa in length. It contains a unique 34 aa N-terminus that binds Rb and prevents cycle progression, followed by a Pro-rich region (aa 35-44) and two SH2 domains that bind the p110 catalytic subunit (aa 65-160 and 358-452). Based on mouse, it is likely that alternate start sites at Met8 and Met32 generate 54 and 50 kDa protein products, respectively. There is also a potential for a start site 18 aa upstream of the standard start site, as well as a splice form that shows a deletion of aa 256-314 that may be accompanied by an additional deletion of aa 36-71. Over aa 251-378, human p55 γ shares 94% aa identity with mouse p55 γ.

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