Human PI 3-Kinase p110γ Antibody

Antigen Affinity-purified Polyclonal Sheep IgG
Catalog Number: AF2999

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human PI 3-Kinase p110γ in direct ELISAs and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant human PI 3–Kinase p110γ Asn298-Leu467 Accession # P48736
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 as a 0.2 μm filtered solution in PBS.

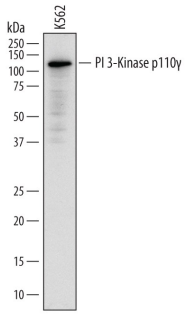
APPLICATIONS

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	2 µg/mL	See Below

DATA

Western Blot



Detection of Human PI 3-Kinase p110γ by Western Blot. Western blot shows lysates of K562 human chronic myelogenous leukemia cell line. PVDF membrane was probed with 2 µg/mL of Sheep Anti-Human PI 3-Kinase p110γ Antigen Affinity-purified Polyclonal Antibody (Catalog # AF2999) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for PI 3-Kinase p110γ at approximately 110 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 0.2 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

p110-gamma (protein kinase 110 kDa gamma; also PI3 kinase subunit gamma, Ser/Thr protein kinase PIK3CG and Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit gamma) is a 110-120 kDa Class I member of the PI3/PI4-kinase family of molecules. Schematically, PI3K (PI3 kinase) is typically thought of as a heterodimeric complex composed of one p85, p101 or p84 regulatory subunit coupled to one p110 catalytic subunit. In response to receptor tyrosine kinase ligation, PI3K is recruited to a transmembrane kinase receptor where it is activated. Active PI3K subsequently catalyzes the phosphorylation of phosphatidylinositol, generating a molecule (PIP3) that mediates downstream signaling. p110γ is one of four p110 genes that generates PIP3. Unlike p110α, β and δ, however, it neither interacts with activated Tyr kinases nor with p85. Instead, it associates with either p101 or p84, and interacts with the GPCR Gβγ subunits to mediate downstream signaling. Human p110γ is 1102 amino acids in length. It contains one ABD (adaptor-binding domain) (aa 34-141), an RBD (ras-binding domain) (217-309), a C2 PI3K-type domain (aa 357-521), a substrate presentating PIK domain (aa 549-725) and a C-terminal catalytic region (aa 830-1046). There is one utilized phosphorylation site at Ser1101. Over aa 298-467, human p110γ shares 94% aa sequence identity with mouse p110γ.

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