

## DESCRIPTION

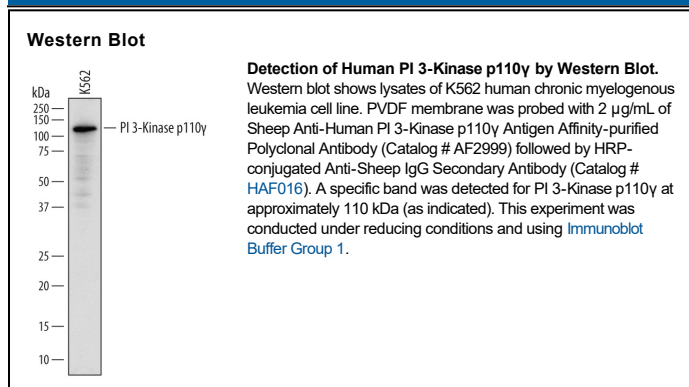
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human PI 3-Kinase p110γ in direct ELISAs and Western blots.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human PI 3-Kinase p110γ Asn298-Leu467 Accession # P48736
<b>Formulation</b>	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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	2 μg/mL	See Below

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.2 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

p110-γ (protein kinase 110 kDa γ; also PI3 kinase subunit γ, Ser/Thr protein kinase PIK3CG and Phosphatidylinositol 4,5-bisphosphate 3-kinase catalytic subunit γ) 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 presenting 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.