

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
Source	Monoclonal Mouse IgG _{2B} Clone # 668619
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human p55 γ Lys251-Gly378 Accession # Q92569
Conjugate	Alexa Fluor 750 Excitation Wavelength: 749 nm Emission Wavelength: 775 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

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.

PRODUCT SPECIFIC NOTICES

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