

PIKE (CT) antibody (pAb)

Rabbit Anti-Human/Mouse Phosphoinositide 3 Kinase Enhancer (Apoptosis Inhibitor)

Instruction Manual

Catalog Number	PK-AB718-3321
Synonyms	PIKE Antibody:
Description	Phosphoinositide 3 kinase enhancer (PIKE) is a recently identified nuclear GTPase that interacts with nuclear phosphoinositide 3-kinase (PI3 kinase) to stimulate its lipid kinase activity. PIKE exists in multiple isoforms; a shorter C-terminal isoform (PIKE-A) has also been identified as centaurin γ 1. The longest isoform (PIKE-L) has been shown to bind to the adaptor protein Homer and thereby link to metabotropic glutamate receptors, leading to activation of PI3 kinase activity and prevention of neuronal apoptosis. Overexpression of PIKE-A enhances Akt activity and promotes cancer cell invasion, whereas decreased expression of PIKE-A via dominant negative expression of PIKE-A or PIKE-A knockdown inhibits these processes. In many human cancers, expression of PIKE-A is enhanced, leading to increased Akt activity and preventing apoptosis.
Quantity	100 μ g
Source / Host	Rabbit
Immunogen	Rabbit polyclonal PIKE antibody was raised against a peptide corresponding to 15 amino acids near the C-terminus of human PIKE (GenBank accession no. AAM97540).
Purification Method	Ion exchange chromatography purified.
Clone / IgG Subtype	Polyclonal antibody
Species Reactivity	Human, Mouse
Specificity	Anti-PIKE will detect both PIKE-L and PIKE-A isoforms.
Formulation	Antibody is supplied in PBS containing 0.02% sodium azide.
Reconstitution	During shipment, small volumes of antibody will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 μ l or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.
Storage & Stability	Antibody can be stored at 4°C for three months and at -20°C for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Applications	E, WB, IHC I Note: Antibody might be suitable for other applications not tested so far. Optimal concentrations for each application have to be determined individually. Application have to be determined individually. PIKE antibody can be used for detection of PIKE by Western blot at 0.5 to 2 μ g/mL. Antibody can also be used for immunohistochemistry starting at 10 μ g/mL.
Images	Available upon request.
References	Ye K, Hurt KJ, Wu FY, et al. Pike. A nuclear gtpase that enhances PI3kinase activity and is regulated by protein 4.1N. Cell 2000; 103:919-30. Jackson TR, Kearns BG, and Thiebert AB. Cytohesins and centaurins: mediators of PI3-kinase-regulated Arf signaling. Trends Biochem. Sci. 2000; 25:489-95. Rong R, Ahn JY, Huang H, et al. PI3 kinase enhancer-Homer complex couples mGluRI to PI3 kinase, preventing neuronal apoptosis. Nat. Neurosci. 2003; 6:1153-61. Ahn J-Y, Rong R, Kroll TG, et al. PIKE (Phosphotylinositol 3-kinase enhancer)-A GTPase stimulates Akt activity and mediates cellular invasion. J. Biol. Chem. 2004; 279:16441-51.
Images	Available upon request.
Related Products	Blocking Peptide, Cat. No. PK-AB718-3321P Mouse brain Cell Lysate, Cat. No. PK-AB718-1403 Akt Antibody, Cat. No. PK-AB718-3519

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