

DESCRIPTION

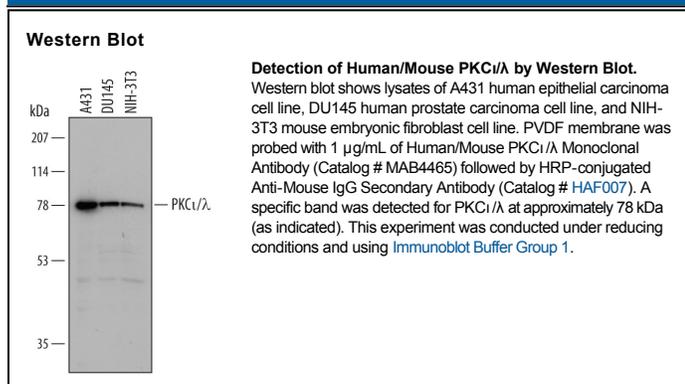
Species Reactivity	Human/Mouse
Specificity	Detects endogenous human and mouse PKC ζ / λ in Western blots.
Source	Monoclonal Mouse IgG ₁ Clone # 450401
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human PKC ζ / λ Ile455-Val596 Accession # P41743
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μ m 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 μ g/mL	See Below

DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
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. <ul style="list-style-type: none"> ● 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

Members of the Protein Kinase C (PKC) family are serine/threonine protein kinases that play a key regulatory role in a number of cellular functions including cell growth and differentiation, hormone secretion, and gene expression. Multiple genes and alternative splicing result in three subfamilies, which differ in their cofactor requirements: conventional PKC isoforms (α , β _I, β _{II}, and γ) which require calcium and phosphatidylserine (PS), diacylglycerol (DAG) or phorbol esters for activation; novel isoforms (δ , ϵ , η , and θ), which are calcium-independent but are still regulated by PS, DAG, or phorbol esters; and atypical isoforms (ι / λ , and ζ), which are calcium-independent and do not require PS, DAG, or phorbol esters for activation. PKC ζ is highly expressed in brain and lung but is also expressed at lower levels in many tissues including pancreatic islets. It is the catalytic component of the Par3-Par6-atypical PKC complex, a key regulator of the formation and maintenance of epithelial cell polarity, adherens junctions, and tight junctions. PKC ζ has also been shown to be critical for Ras-mediated transformation, invasion, and anchorage-independent growth of intestinal epithelial cells. The rodent homolog is termed PKC λ and is 95% homologous to PKC ζ .