

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse, and rat PDK-1 in Western blots.
Source	Monoclonal Mouse IgG _{2A} Clone # 650308
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human PDK-1 Asn411-Gln556 Accession # O15530
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 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.
Immunocytochemistry	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

PDK-1 (3-phosphoinositide-dependent protein kinase, gene name PDK1) is a 58 -68 kDa, 556 amino acid (aa) monomeric protein of the AGC serine/threonine kinase family. It is activated by phosphorylation in the presence of PtdIns(3,4,5) P3 or PtdIns(3,4) P2. Akt, S6 kinases, PKA and PKC-ζ are reported PDK-1 substrates. Through Akt, PDK-1 mediates many of the intracellular actions of insulin. Within the region used as an immunogen, human PDK-1 shares 98% aa identity with mouse and rat PDK-1. One reported isoform has an alternate start site at aa 50, while another lacking aa 238-263 is predicted to be catalytically inactive.

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