## PDK4 Polyclonal Antibody

catalog number: AN006800L



Note: Centrifuge before opening to ensure complete recovery of vial contents.

| Description  |  |
|--------------|--|
| Reactivity   | Mouse;Rat  |
| Immunogen    | Recombinant Human PDK4 protein expressed by E.coli                       |
| Host         | Rabbit   |
| Isotype      | IgG  |
| Purification | Antigen Affinity Purification  |
| Conjugation  | Unconjugated   |
| buffer       | PBS with 0.05% proclin 300, 1% protective protein and 50% glycerol,pH7.4 |
| Applications | Recommended Dilution   |
| WB           | 1:500-1:1000   |
| Data         |  |



Western blot with Anti PDK4 Polyclonal antibody at dilution of 1:1000. Lane 1: Mouse skeletal muscle tissue lysate, Lane

2: Rat skeletal muscle tissue lysate. Observed-MV:50-55 kDa Calculated-MV:46 kDa

| Preparation & Storage |   |
|-----------------------|---|
| Storage               | Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles.                 |
| Shipping              | The product is shipped with ice pack, upon receipt, store it immediately at the |
|                       | temperature recommended.  |

## Background

Kinase that plays a key role in regulation of glucose and fatty acid metabolism and homeostasis via phosphorylation of the pyruvate dehydrogenase subunits PDHA 1 and PDHA2. This inhibits pyruvate dehydrogenase activity, and thereby regulates metabolite flux through the tricarboxylic acid cycle, down-regulates aerobic respiration and inhibits the formation of acetyl-coenzyme A from pyruvate. Inhibition of pyruvate dehydrogenase decreases glucose utilization and increases fat metabolism in response to prolonged fasting and starvation. Plays an important role in maintaining normal blood glucose levels under starvation, and is involved in the insulin signaling cascade. Via its regulation of pyruvate dehydrogenase activity, plays an important role in maintaining normal blood pH and in preventing the accumulation of ketone bodies under starvation. In the fed state, mediates cellular responses to glucose levels and to a high-fat diet. Regulates both fatty acid oxidation and de novo fatty acid biosynthesis. Plays a role in the generation of reactive oxygen species. Protects detached epithelial cells against anoikis. Plays a role in cell proliferation via its role in regulating carbohydrate and fatty acid metabolism.

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