

## PDK4 Polyclonal Antibody

Catalog number: 12949-1-AP

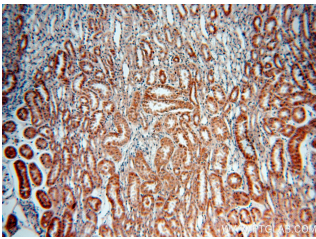
Size: 29 µg/150 µl

Source: Rabbit

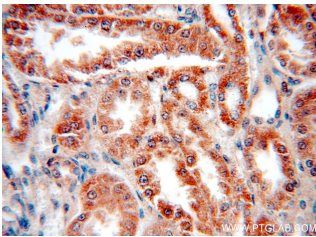
Isotype: IgG

Synonyms:

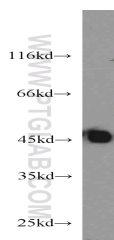
PDK4; FLJ40832, PDK4



Immunohistochemical of paraffin-embedded human kidney using 12949-1-AP (PDK4 antibody) at dilution of 1:50 (under 10x lens)



Immunohistochemical of paraffin-embedded human kidney using 12949-1-AP (PDK4 antibody) at dilution of 1:50 (under 40x lens)



mouse heart tissue were subjected to SDS PAGE followed by western blot with 12949-1-AP (PDK4 antibody) at dilution of 1:1000

### Background

Pyruvate dehydrogenase kinase isoform4 (PDK4) is also named as PDHK4 and belongs to the PDK/BCKDK protein kinase family. It is upregulated by starvation in many tissues of the body during starvation. This causes inactivation of the pyruvate dehydrogenase complex which blocks pyruvate oxidation and conserves lactate and alanine for gluconeogenesis. Enhanced PDK4 expression may be caused by the increase in free fatty acids that occurs during starvation. Free fatty acids can activate peroxisome proliferator-activated receptor  $\alpha$  (PPAR $\alpha$ ), and activation of PPAR $\alpha$  can promote PDK4 expression (PMID:11554740).

### Applications

Tested applications:	ELISA, WB, IHC
Cited applications:	IHC
Species specificity:	Human, Mouse, Rat; other species not tested.
Cited species:	Mouse
Calculated PDK4 MW:	411aa, 46kd
Observed PDK4 MW:	46 kDa
Positive WB detected in	Mouse heart tissue, human heart tissue, human placenta tissue, mouse skeletal muscle tissue, rat heart tissue
Positive IHC detected in	Human kidney tissue, human skeletal muscle tissue
Recommended dilution:	WB: 1:200-1:1000 IHC: 1:20-1:200

Application key: WB = Western blotting, IHC = Immunohistochemistry, IF = Immunofluorescence, IP = Immunoprecipitation

### Immunogen information

Immunogen:	Ag3629
GenBank accession number:	BC040239
Gene ID (NCBI):	5166
Full name:	Pyruvate dehydrogenase kinase, isozyme 4

### Product information

Purification method:	Antigen affinity purification
Storage:	PBS with 0.1% sodium azide and 50% glycerol pH 7.3. Store at -20°C.