PDK2 Rabbit mAb

Catalog No: #49827

Package Size: #49827-1 50ul #49827-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

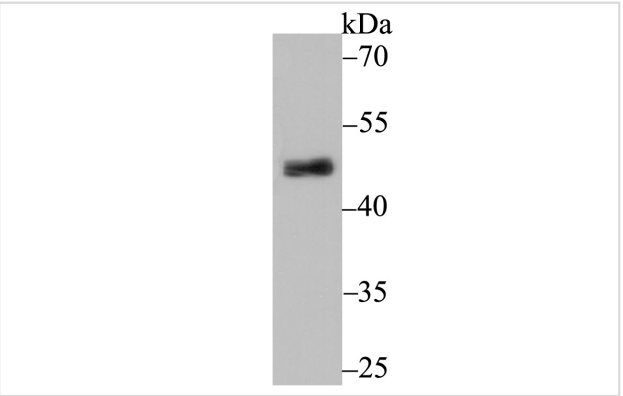
Description

Product Name	PDK2 Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	JB66-93
Purification	ProA affinity purified
Applications	WB,IHC,FC,IP
Species Reactivity	Hu, Ms, Rt
Immunogen Description	Recombinant protein
Other Names	[Pyruvate dehydrogenase [lipoamide]] kinase isozyme 2 antibody mitochondrial antibody PDHK2 antibody PDK2 antibody PDK2_HUMAN antibody Pyruvate dehydrogenase kinase isoform 2 antibody Pyruvate dehydrogenase kinase, isozyme 2 antibody Pyruvate dehydrogenase lipoamide kinase isozyme 2, mitochondrial antibody
Accession No.	Swiss-Prot#:Q15119
Uniprot	Q15119
GeneID	5164;
Calculated MW	46 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

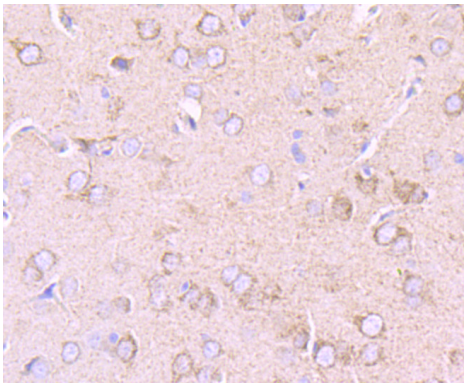
Application Details

WB: 1:500 IHC: 1:50-1:200 FC: 1:50-1:100

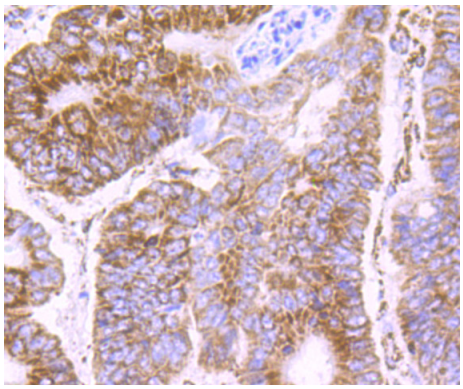
Images



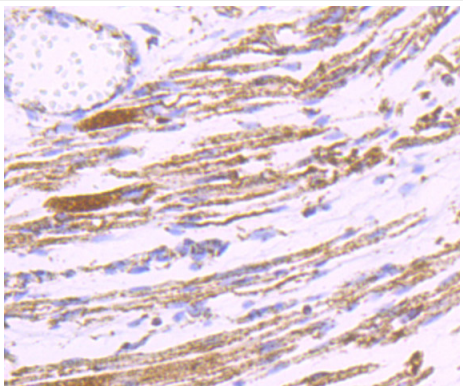
Western blot analysis of PDK2 on rat heart tissue lysate using anti-PDK2 antibody at 1/500 dilution.



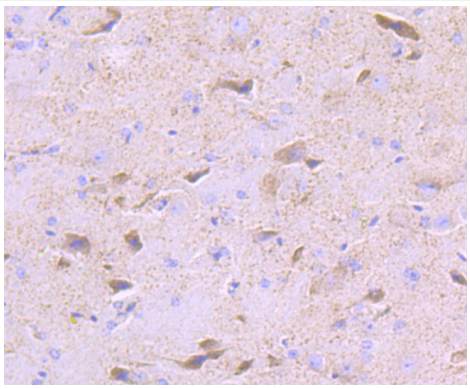
Immunohistochemical analysis of paraffin-embedded rat brain tissue using anti-PDK2 antibody. Counter stained with hematoxylin.



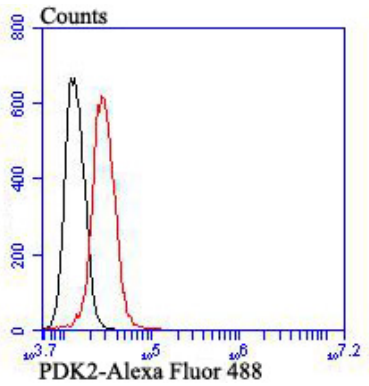
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue using anti-PDK2 antibody. Counter stained with hematoxylin.



Immunohistochemical analysis of paraffin-embedded human fetal skeletal muscle tissue using anti-PDK2 antibody. Counter stained with hematoxylin.



Immunohistochemical analysis of paraffin-embedded mouse cerebellum tissue using anti-PDK2 antibody. Counter stained with hematoxylin.



Flow cytometric analysis of SH-SY-5Y cells with PDK2 antibody at 1/100 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black). Alexa Fluor 488-conjugated goat anti-rabbit IgG was used as the secondary antibody.

Background

Pyruvate dehydrogenase kinase family members (PDK1, 2, 3, 4) are serine kinases that catalyze the phosphorylation of the E1α subunit of the pyruvate dehydrogenase complex (PDC). PDC activity is controlled through phosphorylation and dephosphorylation of the E1α subunit, which leads to inactivation and reactivation, respectively. The core of PDC is composed of sixty dihydrolypoyl acetyltransferase (E2) subunits that bind directly to PDK2 and enhance PDK2 kinase activity. Upregulation of PDK isoenzymes occurs during starvation conditions, rerouting acetyl-CoA generation by facilitating fatty acid oxidation. PDKs contain five conserved regions and are mechanistically similar to bacterial His-kinases, in that both require Histidine residues for activity. In mammals, transcripts for PDK2 are ubiquitously expressed with high levels in heart and skeletal muscle and decreased levels in spleen and lung.

References

Note: This product is for in vitro research use only