Data Sheet (Cat.No.TMAC-03097)

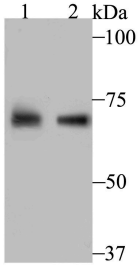
Anti-PCK2 Antibody (4S45)

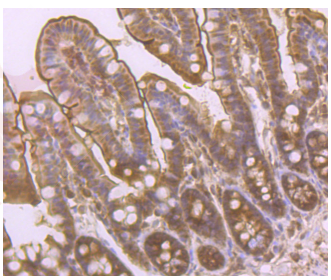
Product Details

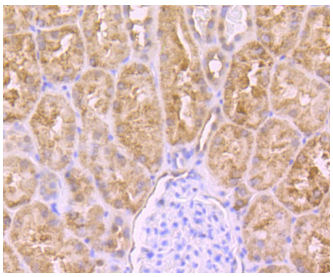
Ig Type:	IgG
Reactivity:	Human,Mouse,Rat
Conjugation:	Unconjugated
Molecular Weight:	Theoretical: 71 kDa.
Clone:	4S45
Purification:	ProA affinity purified

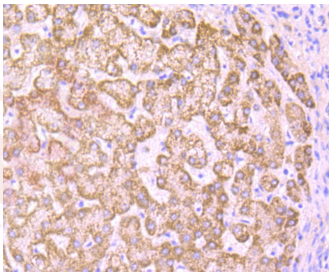
Applications

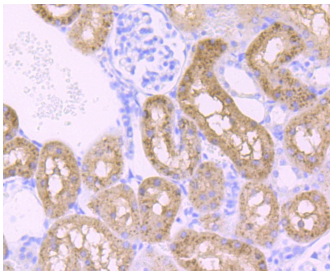
Verified Activity:	1. Western blot analysis of PCK2 on human kidney tissue (1) and MCF-7 cell (2) lysate using anti-PCK2 antibody at 1/500 dilution. 2. Immunohistochemical analysis of paraffin-embedded mouse colon tissue using anti-PCK2 antibody. Counter stained with hematoxylin. 3. Immunohistochemical analysis of paraffin-embedded human kidney tissue using anti-PCK2 antibody. Counter stained with hematoxylin. 4. Immunohistochemical analysis of paraffin-embedded human liver tissue using anti-PCK2 antibody. Counter stained with hematoxylin. 5. Immunohistochemical analysis of paraffin-embedded rat kidney tissue using anti-PCK2 antibody. Counter stained with hematoxylin. 6. Immunohistochemical analysis of paraffin-embedded human colon cancer tissue using anti-PCK2 antibody. Counter stained with hematoxylin. 7. ICC staining PCK2 in HepG2 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS. 8. ICC staining PCK2 in MCF-7 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS. 9. Flow cytometric analysis of MCF-7 cells with PCK2 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.

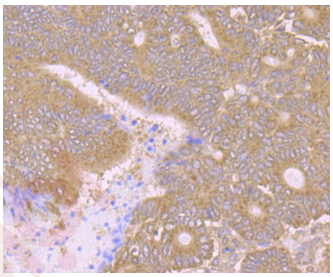


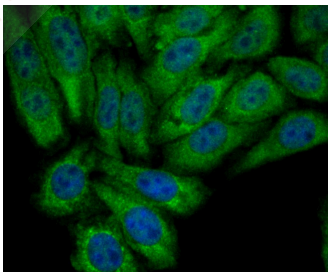


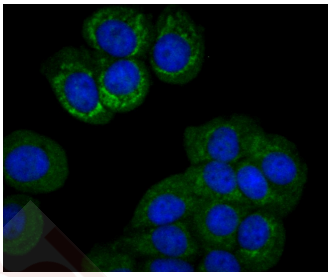


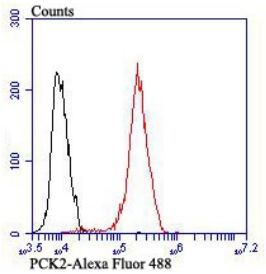












Application: FCM,ICC,IF,IHC,WB

Recommended: WB: 1:500-1000; IHC: 1:50-200; ICC: 1:50-100; FCM: 1:50-100

Properties

Stability & Storage: Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.

Shipping: Shipping with blue ice.

Antigen Details

Immunogen: Recombinant Protein

Uniprot ID: Q16822

Synonyms: phosphoenolpyruvate carboxykinase 2 (mitochondrial);PEPCK;PEPCK-M;PEPCK2

Research Background

Normal adjustment to changes in blood glucose levels depends on Insulin signaling as well as enzymes involved in the regulation of gluconeogenesis. Pathological changes to this process are central to the type 2 diabetes phenotype. Phosphoenolpyruvate carboxykinase (PEPCK) plays an important role in this process by stimulating hepatic glucose production. PEPCK expression increases in response to glucagon and glucocorticoids, while Insulin suppresses expression. Modulation of the signals governing PEPCK levels present a potential therapeutic approach to the treatment of Insulin resistance and consequently obesity. The cytosolic form of PEPCK, known as PEPCK-C, and the mitochondrial form, known as PEPCK-M, are encoded by two different nuclear genes in mouse, human and chicken.

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