Data Sheet (Cat.No.TMAB-06494)

Anti-GK2 Polyclonal Antibody

Product Details

Ig Type:	IgG
Reactivity:	Human,Rat (predicted:Mouse,Dog,Pig,Cow,Horse,Rabbit,Sheep)
Molecular Weight:	Theoretical: 61 kDa.
Purification:	Protein A purified

Applications

Verified Activity:	1. Tissue/cell: Rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01 M, pH 6.0), Boiling bathing for 15 min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30 min; Blocking buffer (normal goat serum) at 37℃ for 20 min; Incubation: Anti-SV2C Polyclonal Antibody, Unconjugated (TMAB-06494) 1:400, overnight at 4° C, followed by conjugation to the secondary antibody and DAB staining 2. Tissue/cell: Human colon carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01 M, pH 6.0), Boiling bathing for 15 min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30 min; Blocking buffer (normal goat serum) at 37℃ for 20 min; Incubation: Anti-SV2C Polyclonal Antibody, Unconjugated (TMAB-06494) 1:400, overnight at 4° C, followed by conjugation to the secondary antibody and DAB staining
Application:	IHC-P,IHC-Fr,IF
Recommended	IHC-P: 1:100-500; IHC-Fr: 1:100-500; IF: 1:100-500

Properties

Stability & Storage:	Store at 2°C-8°C for 1 month. Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	KLH conjugated synthetic peptide: human GK2/Glycerol kinase 2
Antigen Species:	Human
Gene ID:	2712
Uniprot ID:	Q14410

Research Background

GK2 is a 553 amino acid protein that belongs to the FGGY kinase family and is involved in the pathway of glycerol degradation. Localized to the outer membrane of the mitochondrion and expressed at high levels in testis, GK2 functions to catalyze the ATP-dependent conversion of glycerol to glycerol 3-phosphate. Via its catalytic activity, GK2 plays an essential role in the regulation of glycerol uptake and metabolism. The gene encoding GK2 maps to chromosome 4, which encodes nearly 6% of the human genome and has the largest gene deserts (regions of the genome with no protein encoding genes) of all of the human chromosomes. Defects in some of the genes located on chromosome 4 are associated with Huntington's disease, Ellis-van Creveld syndrome, methylmalonic acidemia

polycystic kidney disease.