

Basic Information

Product Name	Anti-KGA/GAC/GLS Antibody	
Gene Name	GLS	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat, monkey	
Tested Application	WB, IHC, ICC/IF, FCM, ELISA	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E. coli-derived human Glutaminase/GLS recombinant protein (Position: K396-N654). Human Glutaminase/GLS shares 99.6% amino acid (aa) sequence identity with both mouse and rat Glutaminase/GLS.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	65-73 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 Flow Cytometry (Fixed): 1:50-200 Enzyme linked immunosorbent assay (ELISA): 1:100-1000 (Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

Storage

12 months from date of receipt, -20°C as supplied.

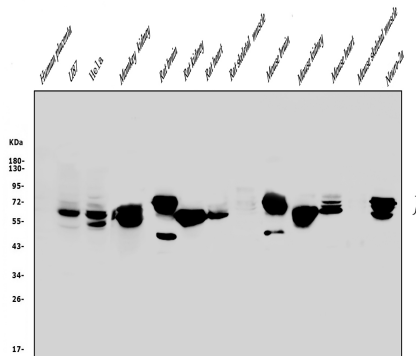
Background Information

This gene encodes the K-type mitochondrial glutaminase. The encoded protein is an phosphate-activated amidohydrolase that catalyzes the hydrolysis of glutamine to glutamate and ammonia. This protein is primarily expressed in the brain and kidney plays an essential role in generating energy for metabolism, synthesizing the brain neurotransmitter glutamate and maintaining acid-base balance in the kidney. Alternate splicing results in multiple transcript variants.

Reference

Anti-KGA/GAC/GLS Antibody被引用在3文献中。

Selected Validation Data



Western blot analysis of KGA/GAC/GLS using anti-KGA/GAC/GLS antibody (A01272-2). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human placenta tissue lysates,

Lane 2: human U87 whole cell lysates,

Lane 3: human HELA whole cell lysates,

Lane 4: Monkey kidney tissue lysates,

Lane 5: Rat brain tissue lysates,

Lane 6: Rat kidney tissue lysates,

Lane 7: Rat heart tissue lysates,

Lane 8: Rat skeletal muscle tissue lysates,

Lane 9: Mouse brain tissue lysates,

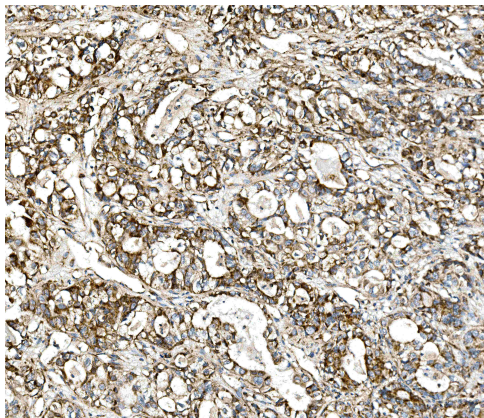
Lane 10: Mouse kidney tissue lysates,

Lane 11: Mouse heart tissue lysates,

Lane 12: Mouse skeletal muscle tissue lysates,

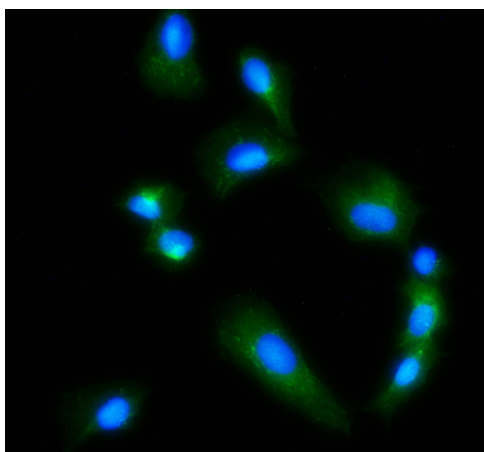
Lane 13: Mouse Neuro-2a whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-KGA/GAC/GLS antigen affinity purified polyclonal antibody (A01272-2) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for KGA/GAC/GLS at approximately 65-73 kDa. The expected band size for KGA/GAC/GLS is at 73 kDa.

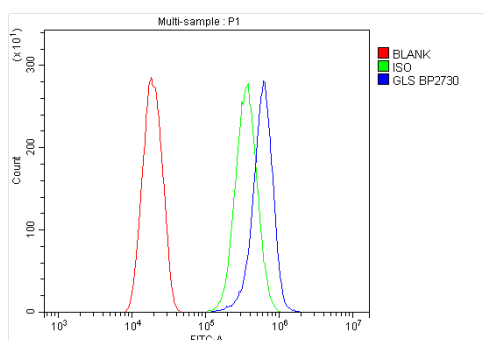


IHC analysis of KGA/GAC/GLS using anti-KGA/GAC/GLS antibody (A01272-2).

KGA/GAC/GLS was detected in a paraffin-embedded section of human gastric cancer tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-KGA/GAC/GLS Antibody (A01272-2) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.



IF analysis of KGA/GAC/GLS using anti-KGA/GAC/GLS antibody (A01272-2). KGA/GAC/GLS was detected in an immunocytochemical section of U2OS cells. The section was incubated with rabbit anti-KGA/GAC/GLS Antibody (A01272-2) at a dilution of 1:100. DyLight®488 Conjugated Goat Anti-Rabbit IgG (Green) (Catalog # BA1127) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



Flow Cytometry analysis of SiHa cells using anti-KGA/GAC/GLS antibody (A01272-2).

Overlay histogram showing SiHa cells stained with A01272-2 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-KGA/GAC/GLS Antibody (A01272-2) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.