Data Sheet (Cat.No.TMAB-11961)

Anti-PYK2 Antibody (2I619)

Product Details

Ig Type:	IgG
Reactivity:	Human,Mouse,Rat
Molecular Weight:	Theoretical: 116 kDa. Actual: 125 kDa.
Clone:	2I619
Purification:	Protein A purified

Applications

Verified Activity:	1. 25 ug total protein per lane of various lysates (see on figure) probed with PYK2 monoclonal antibody, unconjugated (TMAB-11961) at 1: 1000 dilution and 4°C overnight incubation. Followed by conjugated secondary antibody incubation at r. T. for 60 min. 2. Paraformaldehyde-fixed, paraffin embedded Mouse Cerebrum; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; The section was incubated with PYK2 Monoclonal Antibody, Unconjugated (TMAB-11961) at 1:200 overnight at 4°C, followed by conjugation to the Goat Anti-Rabbit IgG H&L-HRP and DAB staining. 3. Paraformaldehyde-fixed, paraffin embedded Rat Cerebrum; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; The section was incubated with PYK2 Monoclonal Antibody, Unconjugated (TMAB-11961) at 1:200 overnight at 4°C, followed by conjugation to the Goat Anti-Rabbit IgG H&L-HRP and DAB staining. 4. Paraformaldehyde-fixed, paraffin embedded Human Cerebrum; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; The section was incubated with PYK2 Monoclonal Antibody, Unconjugated (TMAB-11961) at 1:200 overnight at 4°C, followed by conjugation to the Goat Anti-Rabbit IgG H&L-HRP and DAB staining. 5. Paraformaldehyde-fixed, paraffin embedded Mouse Spleen; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; The section was incubated with PYK2 Monoclonal Antibody, Unconjugated (TMAB-11961) at 1:200 overnight at 4°C, followed by conjugation to the Goat Anti-Rabbit IgG H&L-HRP and DAB staining. 6. Paraformaldehyde-fixed, paraffin embedded Human Spleen; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; The section was incubated with PYK2 Monoclonal Antibody, Unconjugated (TMAB-11961) at 1:200 overnight at 4°C, followed by conjugation to the Goat Anti-Rabbit IgG H&L-HRP and DAB staining. 7. Paraformaldehyde-fixed, paraffin embedded Human Glioma; Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; The section was incubated with PYK2 Monoclonal Antibody, Unconjugated (TMAB-11961) at 1:200 overnight at 4°C, followed by conjugation to the Goat Anti-Rabbit IgG H&L-HRP and DAB staining. 8. The Jurkat (H) cells were fixed with 4% PFA (10 min at r. T.) and then permeabilized with 90% ice-cold methanol for 20 min at -20°C, the cells then were incubated in 5% BSA to block non-specific protein-protein interactions (30 min at r. T.), followed by secondary antibody incubation for 40 min at room temperature. Primary Antibody (green): Rabbit Anti-PYK2 antibody (TMAB-11961, 1: 100); Isotype Control (orange): Rabbit IgG. Blank control (black): PBS. Acquisition of 20,000 events was performed. 9. 4% Paraformaldehyde-fixed Jurkat (H) cell; Triton X-100 at r. T. for 20 min; Antibody incubation with (PYK2) monoclonal Antibody, unconjugated (TMAB-11961) 1: 100, 90 min at 37° C; followed by conjugated Goat Anti-Rabbit IgG antibody (green, BF488) at 37°C for 90 min,

	DAPI (blue) was used to stain the cell nuclei. PBS instead of the primary antibody was used as the blank control.
Application:	WB,IHC-P,ICC/IF,IF,FCM,IHC-Fr
Recommended	WB: 1:500-2000; IHC-P: 1:100-500; ICC/IF: 1:50-200; IF: 1:100-500; FCM: 1:50-100; IHC-Fr: 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:	Human PYK2 between 1-100 amino acids
Antigen Species:	Human
Gene ID:	2185
Uniprot ID:	Q14289

Research Background

This gene encodes a cytoplasmic protein tyrosine kinase which is involved in calcium-induced regulation of ion channels and activation of the map kinase signaling pathway. The encoded protein may represent an important signaling intermediate between neuropeptide-activated receptors or neurotransmitters that increase calcium flux and the downstream signals that regulate neuronal activity. The encoded protein undergoes rapid tyrosine phosphorylation and activation in response to increases in the intracellular calcium concentration, nicotinic acetylcholine receptor activation, membrane depolarization, or protein kinase C activation. This protein has been shown to bind CRK-associated substrate, nephrocystin, GTPase regulator associated with FAK, and the SH2 domain of GRB2. The encoded protein is a member of the FAK subfamily of protein tyrosine kinases but lacks significant sequence similarity to kinases from other subfamilies. Four transcript variants encoding two different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481