

LYK5 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP7142A

Product Information

Application	WB, FC, IF, E
Primary Accession	Q7RTN6
Other Accession	Q3UUJ4
Reactivity	Human, Mouse
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB8539
Calculated MW	48369
Antigen Region	12-41

Additional Information

Gene ID	92335
Other Names	STE20-related kinase adapter protein alpha, STRAD alpha, STE20-related adapter protein, Serologically defined breast cancer antigen NY-BR-96, STRADA, LYK5 {ECO:0000312 EMBL:AAP422801}, STRAD
Target/Specificity	This LYK5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 12-41 amino acids from the N-terminal region of human LYK5.
Dilution	WB~~1:1000 FC~~1:25 IF~~1:25 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	LYK5 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	STRADA
Synonyms	LYK5 {ECO:0000312 EMBL:AAP42280.1}, STRA

Function Pseudokinase which, in complex with CAB39/MO25 (CAB39/MO25alpha or CAB39L/MO25beta), binds to and activates STK11/LKB1. Adopts a closed conformation typical of active protein kinases and binds STK11/LKB1 as a pseudosubstrate, promoting conformational change of STK11/LKB1 in an active conformation.

Cellular Location Nucleus. Cytoplasm

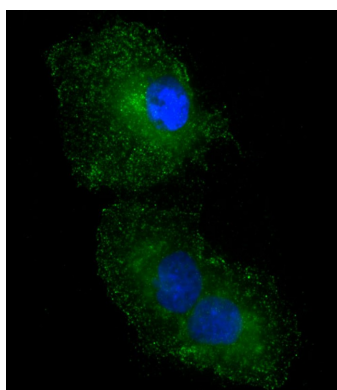
Background

LYK5, also STE20-related Adaptor Protein (STRAD) are members of STE-20 like kinase family that are known to stimulate MAPK pathways by directly activating MAPKKK. LYK5 is a novel pseudokinase member of this family consisting of a STE-20 like kinase domain but lacks several residues that are required for its catalytic activity. It specifically binds LKB1 and plays a key role in regulating tumor suppressor activities of LKB1. It functions as an upstream activator of LKB1 and also directs the sub-cellular localization of LKB1 by anchoring it in the cytoplasm. STRAD-LKB1 interaction results in phosphorylation of STRAD and enhanced autophosphorylation of LKB1.

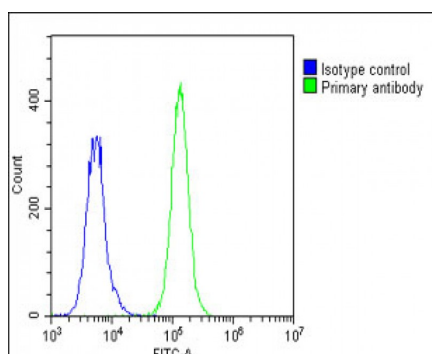
References

Baas, A.F., et al., EMBO J. 22(12):3062-3072 (2003).
Scanlan, M.J., et al., Cancer Immun. 1, 4 (2001).

Images

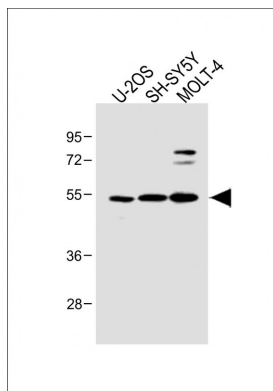


Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized A549 cells labeling STRADA with AP7142A at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-Rabbit IgG (OH191631) secondary antibody at 1/200 dilution (green). Immunofluorescence image showing cytoplasm, nucleus weakly staining on A549 cell line. Cytoplasmic actin is detected with Dylight® 554 Phalloidin (1186255) at 1/500 dilution (red). The nuclear counter stain is DAPI (blue).



Overlay histogram showing A549 cells stained with AP7142A (green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then incubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP7142A, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, Dylight® 488 Conjugated Highly Cross-Adsorbed (1583138) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG1 (1 µg/1x10⁶ cells) used under the same conditions. Acquisition of >10,000 events was performed.

All lanes : Anti-LYK5 Antibody (N-term) at 1:2000 dilution
Lane 1: U-2OS whole cell lysate Lane 2: SH-SY5Y whole cell lysate Lane 3: MOLT-4 whole cell lysate
Lysates/proteins at 20 µg per lane. Secondary Goat



Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 48 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.