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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, Rat, Bovine, Canine, Rabbit, Chicken
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

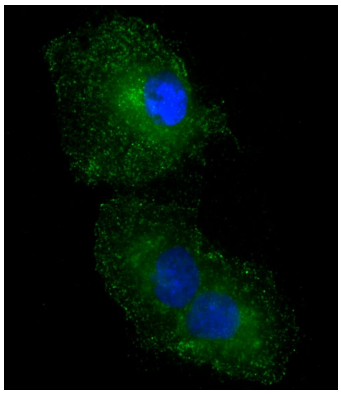
Background

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.

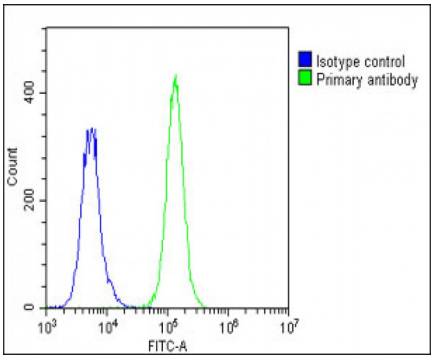
References

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

Images

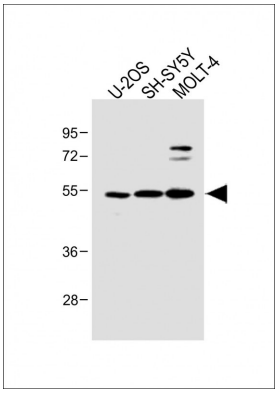


Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0. 1% Triton X-100 permeabilized A549 cells labeling STRADA with AP7142A at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-Rabbit IgG (OH191631) secondary antibody at 1/200 dilution (green). Immunofluorescence image showing cytoplasm, 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 icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP7142A, 1:25 dilution) for 60 min at 37ºC. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(1583138) at 1/200 dilution for 40 min at 37ºC. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10^6 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'.