

ARG64833 anti-ARK5 / NUA1 antibody

Package: 100 µg
Store at: -20°C

Summary

Product Description	Goat Polyclonal antibody recognizes ARK5 / NUA1
Tested Reactivity	Hu
Predict Reactivity	Cow, Rat
Tested Application	FACS, ICC/IF
Host	Goat
Clonality	Polyclonal
Isotype	IgG
Target Name	ARK5 / NUA1
Species	Human
Immunogen	C-QNRPRPQYLKRYRNR
Conjugation	Un-conjugated
Alternate Names	ARK5; NUA1 family SNF1-like kinase 1; AMPK-related protein kinase 5; Omphalocele kinase 1; EC 2.7.11.1

Application Instructions

Application table	Application	Dilution
	FACS	10 µg/ml
	ICC/IF	10 µg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

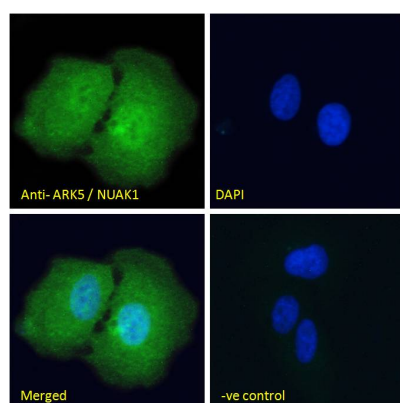
Properties

Form	Liquid
Purification	Purified from goat serum by antigen affinity chromatography.
Buffer	Tris saline (pH 7.3), 0.02% Sodium azide and 0.5% BSA.
Preservative	0.02% Sodium azide
Stabilizer	0.5% BSA
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Bioinformation

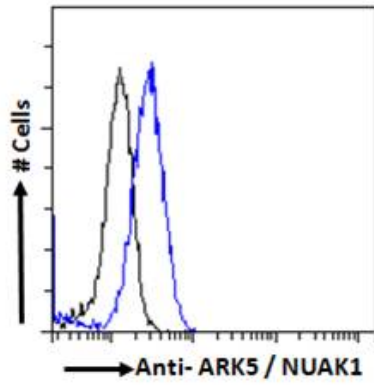
Database links	GeneID: 9891 Human Swiss-port # O60285 Human
Gene Symbol	NUAK1
Gene Full Name	NUAK family, SNF1-like kinase, 1
Function	<p>Serine/threonine-protein kinase involved in various processes such as cell adhesion, regulation of cell ploidy and senescence, cell proliferation and tumor progression. Phosphorylates ATM, CASP6, LATS1, PPP1R12A and p53/TP53. Acts as a regulator of cellular senescence and cellular ploidy by mediating phosphorylation of 'Ser-464' of LATS1, thereby controlling its stability. Controls cell adhesion by regulating activity of the myosin protein phosphatase 1 (PP1) complex. Acts by mediating phosphorylation of PPP1R12A subunit of myosin PP1: phosphorylated PPP1R12A then interacts with 14-3-3, leading to reduced dephosphorylation of myosin MLC2 by myosin PP1. May be involved in DNA damage response: phosphorylates p53/TP53 at 'Ser-15' and 'Ser-392' and is recruited to the CDKN1A/WAF1 promoter to participate to transcription activation by p53/TP53. May also act as a tumor malignancy-associated factor by promoting tumor invasion and metastasis under regulation and phosphorylation by AKT1. Suppresses Fas-induced apoptosis by mediating phosphorylation of CASP6, thereby suppressing the activation of the caspase and the subsequent cleavage of CFLAR. Regulates UV radiation-induced DNA damage response mediated by CDKN1A. In association with STK11, phosphorylates CDKN1A in response to UV radiation and contributes to its degradation which is necessary for optimal DNA repair (PubMed:25329316). [UniProt]</p>
Research Area	Cancer antibody; Signaling Transduction antibody
Calculated Mw	74 kDa
PTM	<p>Ubiquitinated with 'Lys-29'- and 'Lys-33'-linked polyubiquitins which appear to impede LKB1-mediated phosphorylation. Deubiquitinated by USP9X.</p> <p>Phosphorylated at Thr-211 by STK11/LKB1 in complex with STE20-related adapter-alpha (STRADA) pseudo kinase and CAB39. Not dephosphorylated by the myosin PP1 complex when regulating its activity, due to the presence of PPP1R12A, which prevents myosin PP1 from dephosphorylating NUAK1. Phosphorylated by STK38L upon stimulation with IGF1.</p>

Images



ARG64833 anti-ARK5 / NUAK1 antibody ICC/IF image

Immunofluorescence: Paraformaldehyde fixed U2OS cells permeabilized with 0.15% Triton. Cells were stained with ARG64833 anti-ARK5 / NUAK1 antibody (green) at 10 µg/ml dilution for 1 hour. DAPI (blue) for nuclear staining. Negative control: Unimmunized goat IgG (green) at 10 µg/ml dilution.



ARG64833 anti-ARK5 / NUAK1 antibody FACS image

Flow Cytometry: Paraformaldehyde-fixed A431 cells permeabilized with 0.5% Triton. Cells were stained with ARG64833 anti-ARK5 / NUAK1 antibody (blue line) at 10 µg/ml dilution for 1 hour, followed by incubation with Alexa FluorR 488 labelled secondary antibody. IgG control: Unimmunized goat IgG (black line).