

ARG64308 anti-ITCH / AIF4 antibody

Package: 100 µg
Store at: -20°C

Summary

Product Description	Goat Polyclonal antibody recognizes ITCH / AIF4
Tested Reactivity	Hu
Predict Reactivity	Ms, Rat, Cow, Dog
Tested Application	FACS, ICC/IF, WB
Host	Goat
Clonality	Polyclonal
Isotype	IgG
Target Name	ITCH / AIF4
Species	Human
Immunogen	C-EIKSHDLKPNGGN
Conjugation	Un-conjugated
Alternate Names	EC 6.3.2.-; Itch; Atrophin-1-interacting protein 4; ADMFD; E3 ubiquitin-protein ligase Itchy homolog; NFE2-associated polypeptide 1; AIF4; AIP4; NAPP1

Application Instructions

Application table	Application	Dilution
	FACS	10 µg/ml
	ICC/IF	10 µg/ml
	WB	0.1 - 0.3 µg/ml

Application Note WB: Recommend incubate at RT for 1h.
* 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.

Note

For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links

[GeneID: 83737 Human](#)

[Swiss-port # Q96J02 Human](#)

Background

This gene encodes a member of the Nedd4 family of HECT domain E3 ubiquitin ligases. HECT domain E3 ubiquitin ligases transfer ubiquitin from E2 ubiquitin-conjugating enzymes to protein substrates, thus targeting specific proteins for lysosomal degradation. The encoded protein plays a role in multiple cellular processes including erythroid and lymphoid cell differentiation and the regulation of immune responses. Mutations in this gene are a cause of syndromic multisystem autoimmune disease. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Mar 2012]

Research Area

Cell Biology and Cellular Response antibody

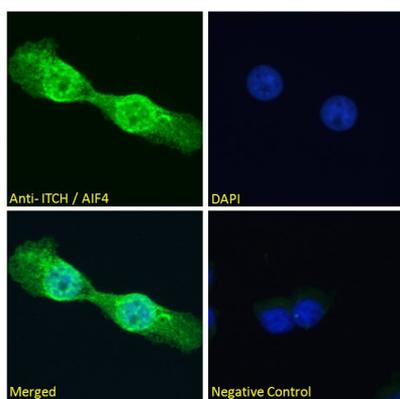
Calculated Mw

103 kDa

PTM

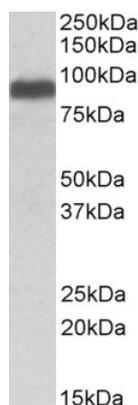
On T-cell activation, phosphorylation by the JNK cascade on serine and threonine residues surrounding the PRR domain accelerates the ubiquitination and degradation of JUN and JUNB. The increased ITCH catalytic activity due to phosphorylation by JNK1 may occur due to a conformational change disrupting the interaction between the PRR/WW motifs domain and the HECT domain and, thus exposing the HECT domain (By similarity). Phosphorylation by FYN reduces interaction with JUNB and negatively controls JUN ubiquitination and degradation. Ubiquitinated; autopolyubiquitination with 'Lys-63' linkages which does not lead to protein degradation.

Images



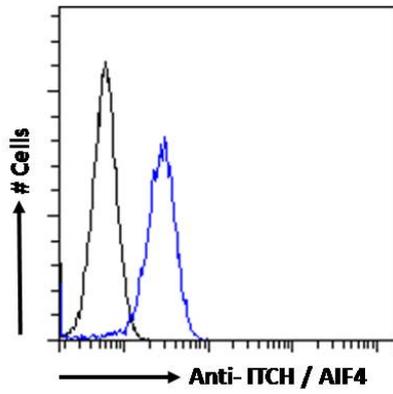
ARG64308 anti-ITCH / AIF4 antibody ICC/IF image

Immunofluorescence: Paraformaldehyde fixed A431 cells permeabilized with 0.15% Triton. Cells were stained with ARG64308 anti-ITCH / AIF4 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.



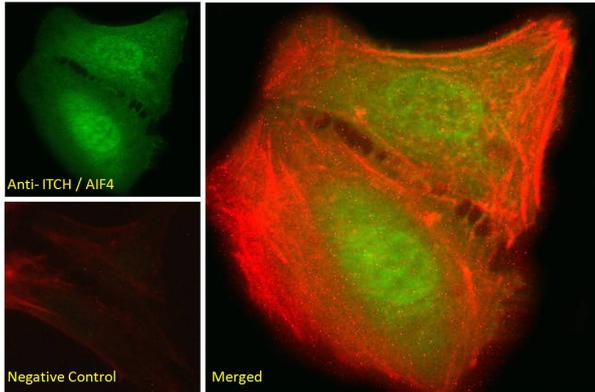
ARG64308 anti-ITCH / AIF4 antibody WB image

Western blot: 35 µg of Human brain (frontal cortex) lysate (in RIPA buffer) stained with ARG64308 anti-ITCH / AIF4 antibody at 0.1 µg/ml dilution and incubated at RT for 1 hour.



ARG64308 anti-ITCH / AIF4 antibody FACS image

Flow Cytometry: Paraformaldehyde-fixed HeLa cells permeabilized with 0.5% Triton. Cells were stained with ARG64308 anti-ITCH / AIF4 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).



ARG64308 anti-ITCH / AIF4 antibody ICC/IF image

Immunofluorescence: Paraformaldehyde fixed U2OS cells permeabilized with 0.15% Triton. Cells were stained with ARG64308 anti-ITCH / AIF4 antibody (green) at 10 µg/ml dilution for 1 hour. Phalloidin (red) for Actin filaments staining. Negative control: Unimmunized goat IgG (green) at 10 µg/ml dilution.