

Rabbit ITCH/AIP4 Polyclonal Antibody | anti-ITCH antibody

Anti-ITCH/AIP4 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125527	Rabbit	Human, Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Immunofluorescence, Immunocytochemistry, Immunohistochemistry, Western Blot

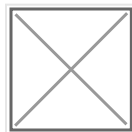
PRODUCT SYNONYMS

ITCH/AIP4; Polyclonal Antibody; Anti-ITCH/AIP4 Antibody; E3 ubiquitin-protein ligase Itchy homolog; Itch; Atrophin-1-interacting protein 4; AIP4; HECT-type E3 ubiquitin transferase Itchy homolog; NFE2-associated polypeptide 1; NAPP1; ITCH; itchy E3 ubiquitin protein ligase; anti-ITCH antibody

PRODUCT SPECIFICATIONS

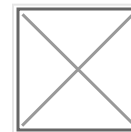
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for ITCH/AIP4 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.01mg NaN3.
Applicable Applications for anti-ITCH antibody	ELISA (Direct ELISA), FCM/FACS (Flow Cytometry), IF (Immunofluorescence), ICC (Immunocytochemistry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	E Coli-derived human ITCH/AIP4 recombinant protein (Position: K17-E358).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.

IMAGES



FCM/FACS (Flow Cytometry)

Figure 5. Flow Cytometry analysis of SiHa cells using anti-ITCH/AIP4 antibody (AAA125527). Overlay histogram showing SiHa cells stained with AAA125527 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-ITCH/AIP4 Antibody (AAA125527, 1µg/1x10⁶ cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10µg/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1µg/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IF (Immunofluorescence)

Figure 4. IF analysis of ITCH/AIP4 using anti-ITCH/AIP4 antibody (AAA125527). ITCH/AIP4 was detected in immunocytochemical section of A431 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 2µg/mL rabbit anti-ITCH/AIP4 Antibody (AAA125527) overnight at 4 degree C. DyLight®488 Conjugated Goat Anti-Rabbit IgG was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



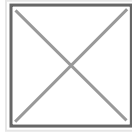
IHC (Immunohistochemisry)

Figure 3. IHC analysis of ITCH/AIP4 using anti-ITCH/AIP4 antibody (AAA125527).ITCH/AIP4 was detected in paraffin-embedded section of human rectal cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1μg/ml rabbit anti-ITCH/AIP4 Antibody (AAA125527) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



IHC (Immunohiostchemistry)

Figure 2. IHC analysis of ITCH/AIP4 using anti-ITCH/AIP4 antibody (AAA125527).ITCH/AIP4 was detected in paraffin-embedded section of human mammary cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1μg/ml rabbit anti-ITCH/AIP4 Antibody (AAA125527) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of ITCH using anti-ITCH antibody (AAA125527).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.Lane 1: human K562 whole cell lysatesLane 2: human Raji whole cell lysatesLane 3: rat C6 whole cell lysatesLane 4: mouse NIH/3T3 whole cell lysatesLane 5: human HepG2 whole cell lysatesLane 6: human A549 whole cell lysatesLane 7: human THP-1 whole cell lysates.After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1. 5 hour at RT. The membrane was incubated with rabbit anti-ITCH antigen affinity purified polyclonal antibody (Catalog # AAA125527) at 0. 25 μg/mL overnight at 4 degree C, then washed with TBS-0. 1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1. 5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for ITCH at approximately 103KD. The expected band size for ITCH is at 103KD.

ADDITIONAL INFORMATION

Related Product Information for anti-ITCH antibody	ITCH is an ubiquitin-conjugating enzyme. 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.
References	1. Dorjbal B; Derse D; Lloyd P; Soheilian F; Nagashima K; Heidecker G. "The role of ITCH protein in human T-cell leukemia virus type 1 release". J Biol Chem, 2011 Sep 9. 2. Rossi M; Inoue S; Walewska R; Knight RA; Dyer MJ; Cohen GM; Melino G. "Caspase cleavage of Itch in chronic lymphocytic leukemia cells". Biochem Biophys Res Commun, 2009 Feb 13.

NCBI AND UNIPROT INFORMATION

NCBI GI #	380420335
NCBI GeneID	83737
NCBI Accession #	NP_001244066.1
NCBI GenBank Nucleotide #	NM_001257137.1
UniProt Accession #	Q96J02; O43584; Q5QP37; Q5TEL0; Q96F66; Q9BY75; Q9H451; Q9H4U5; A6NEW4; B4E234; E1P5P3; F5H217
Molecular Weight	102,803 Da
NCBI Official Full Name	E3 ubiquitin-protein ligase Itchy homolog isoform 1
NCBI Official Synonym Full Names	itchy E3 ubiquitin protein ligase

NCBI Official Symbol	ITCH
NCBI Official Synonym Symbols	AIF4; AIP4; NAPP1; dJ468O1.1
NCBI Protein Information	E3 ubiquitin-protein ligase Itchy homolog; NFE2-associated polypeptide 1; atrophin-1 interacting protein 4; itchy E3 ubiquitin protein ligase homolog; dJ468O1.1 (atrophin 1 interacting protein 4 (AIP4))
UniProt Protein Name	E3 ubiquitin-protein ligase Itchy homolog
UniProt Gene Name	ITCH
UniProt Synonym Gene Names	Itch; AIP4; NAPP1
UniProt Entry Name	ITCH_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/itch-aip4-antibody-direct-elisa-flow-cytometry-immunofluorescence-immunocytochemistry-immunohistochemistry-western-blot-elisa/125527>