

Datasheet for ABIN7180034
anti-ITCH antibody (Tyr420)[Go to Product page](#)

2 Images

Overview

Quantity:	100 µL
Target:	ITCH
Binding Specificity:	Tyr420
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This ITCH antibody is un-conjugated
Application:	ELISA, Western Blotting (WB)

Product Details

Immunogen:	Synthesized non-phosphopeptide derived from Human ITCH around the phosphorylation site of tyrosine 420 (F-I-Y(p)-G-N).
Isotype:	IgG
Cross-Reactivity:	Human, Mouse
Purification:	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Target Details

Target:	ITCH
Alternative Name:	ITCH (ITCH Products)

Background:

Background: Acts as an E3 ubiquitin-protein ligase which accepts ubiquitin from an E2 ubiquitin-conjugating enzyme in the form of a thioester and then directly transfers the ubiquitin to targeted substrates. It catalyzes 'Lys-29', 'Lys-48' and 'Lys-63'-linked ubiquitin conjugation. It is involved in the control of inflammatory signaling pathways. Is an essential component of a ubiquitin-editing protein complex, comprising also TNFAIP3, TAX1BP1 and RNF11, that ensures the transient nature of inflammatory signaling pathways. Promotes the association of the complex after TNF stimulation. Once the complex is formed, TNFAIP3 deubiquitinates 'Lys-63' polyubiquitin chains on RIPK1 and catalyzes the formation of 'Lys-48'-polyubiquitin chains. This leads to RIPK1 proteasomal degradation and consequently termination of the TNF- or LPS-mediated activation of NFkB1. Ubiquitinates RIPK2 by 'Lys-63'-linked conjugation and influences NOD2-dependent signal transduction pathways. Regulates the transcriptional activity of several transcription factors, and probably plays an important role in the regulation of immune response. Ubiquitinates NFE2 by 'Lys-63' linkages and is implicated in the control of the development of hematopoietic lineages. Critical regulator of T-helper (TH2) cytokine development through its ability to induce JUNB ubiquitination and degradation By similarity. Ubiquitinates SNX9. Ubiquitinates CXCR4 and HGS/HRS and regulates sorting of CXCR4 to the degradative pathway. It is involved in the negative regulation of MAVS-dependent cellular antiviral responses. Ubiquitinates MAVS through 'Lys-48'-linked conjugation resulting in MAVS proteasomal degradation. Involved in the regulation of apoptosis and reactive oxygen species levels through the ubiquitination and proteasomal degradation of TXNIP. Mediates the antiapoptotic activity of epidermal growth factor through the ubiquitination and proteasomal degradation of p15 BID. Targets DTX1 for lysosomal degradation and controls NOTCH1 degradation, in the absence of ligand, through 'Lys-29'-linked polyubiquitination.

Chen X., Genomics 73:238-241(2001).

Deloukas P., Nature 414:865-871(2001).

Wood J.D., Mol. Cell. Neurosci. 11:149-160(1998).

Aliases: ADMFD antibody, AIF4 antibody, AIP4 antibody, Atrophin 1 interacting protein 4 antibody, Atrophin-1-interacting protein 4 antibody, dJ46801.1 antibody, dJ46801.1 (atrophin 1 interacting protein 4 (AIP4)) antibody, dJ46801.1 atrophin 1 interacting protein 4 AIP4 antibody, E3 ubiquitin protein ligase Itchy homolog antibody, E3 ubiquitin-protein ligase Itchy homolog antibody, EC 6.3.2 antibody, Itch antibody, ITCH_HUMAN antibody, Itchy E3 ubiquitin protein ligase antibody, Itchy E3 ubiquitin protein ligase homolog antibody, Itchy E3 ubiquitin protein ligase homolog mouse antibody, Itchy E3 ubiquitin protein ligase, mouse, homolog of antibody, Itchy homolog E3 ubiquitin protein ligase antibody, Itchy mouse homolog E3 ubiquitin protein ligase antibody, NAPP1 antibody, NFE2 associated polypeptide 1 antibody, NFE2-associated

Target Details

	polypeptide 1 antibody, Ubiquitin protein ligase ITCH antibody
UniProt:	Q96J02
Pathways:	Activation of Innate immune Response , CXCR4-mediated Signaling Events

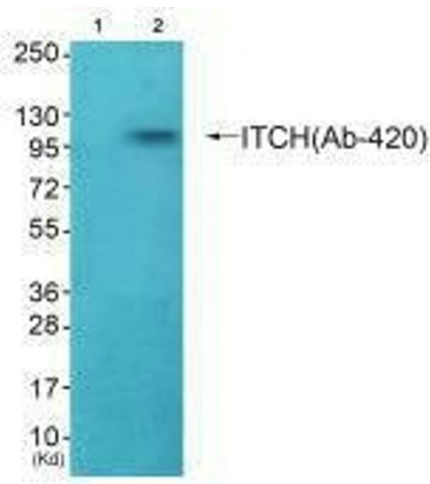
Application Details

Application Notes:	WB:1:500-1:3000,
Restrictions:	For Research Use only

Handling

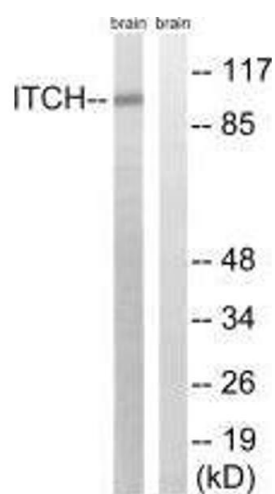
Format:	Liquid
Buffer:	Rabbit IgG in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150 mM NaCl, 0.02 % sodium azide and 50 % glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C,-80 °C
Storage Comment:	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.

Images



Western Blotting

Image 1. Western blot analysis of extracts from HepG2 cells (Lane 2), using ITCH (Ab-420) antibody. The lane on the left is treated with synthesized peptide.



Western Blotting

Image 2. Western blot analysis of extracts from mouse brain cells, using ITCH (Ab-420) antibody.