



ITCH (Ab-420) Antibody

Product Code	CSB-PA168801
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	Q96J02
Immunogen	Synthesized non-phosphopeptide derived from Human ITCH around the phosphorylation site of tyrosine 420 (F-I-Y(p)-G-N).
Raised In	Rabbit
Species Reactivity	Human, Mouse
Specificity	The antibody detects endogenous levels of total ITCH protein.
Tested Applications	ELISA, WB; WB: 1:500-1:3000
Relevance	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 NFκB1. 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).
Form	Rabbit IgG in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4,



150mM NaCl, 0.02% sodium azide and 50% glycerol.

Purification Method

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Clonality

Polyclonal

Alias

AIF4; AIP4; atrophin-1-interacting protein 4; EC 6.3.2.-; Itchy homolog E3 ubiquitin protein ligase

Product Type

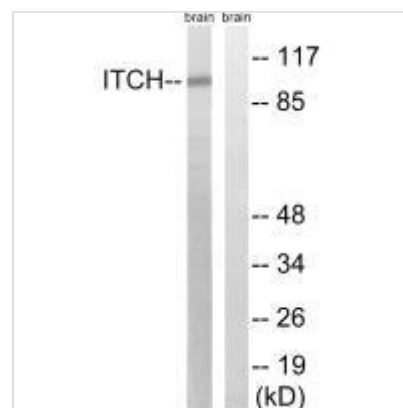
Polyclonal Antibody

Species

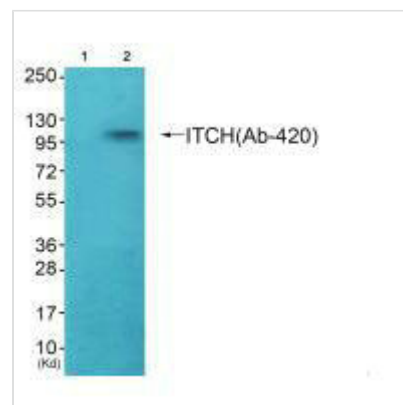
Homo sapiens (Human)

Target Names

ITCH

Image


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



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.