

## AIP4 (phospho Tyr420) Polyclonal Antibody

Catalog No: YP1072

**Reactivity:** Human; Mouse

**Applications:** IHC;IF;ELISA

Target: AIP4

**Fields:** >>Ubiquitin mediated proteolysis;>>Endocytosis;>>TNF signaling

pathway;>>Non-alcoholic fatty liver disease

Gene Name: ITCH

**Protein Name:** E3 ubiquitin-protein ligase Itchy homolog

Q96J02

Q8C863

Human Gene Id: 83737

**Human Swiss Prot** 

No:

Mouse Gene Id: 16396

**Mouse Swiss Prot** 

No:

**Immunogen:** The antiserum was produced against synthesized peptide derived from human

ITCH around the phosphorylation site of Tyr420. AA range:386-435

Specificity: Phospho-AIP4 (Y420) Polyclonal Antibody detects endogenous levels of AIP4

protein only when phosphorylated at Y420.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

**Dilution:** IHC 1:100 - 1:300. ELISA: 1:20000.. IF 1:50-200

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

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**Concentration**: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Molecularweight: 103kD

**Cell Pathway:** Ubiquitin mediated proteolysis; Endocytosis;

**Background:** itchy E3 ubiquitin protein ligase(ITCH) Homo sapiens 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],

**Function:** function: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. Regulates the transcriptional activity of several transcription factors, and probably plays an important role in the regulation of

immune response.,pathway:Protein modification; protein

ubiquitination.,PTM:Phosphorylated on tyrosine residues.,similarity:Contains 1 C2 domain.,similarity:Contains 1 HECT (E6AP-type E3 ubiquitin-protein ligase) domain.,similarity:Contains 4 WW domains.,subunit:Interacts via its WW domains with DRPLA, NFE2 and CBLC. Interacts with Epstein-Barr virus LMP2A. Interacts

with NOTCH1, OCLN, JUN and JUNB. Interacts with NDFIP1 in vitro (By similarity). Interacts with ARHGEF7.,tissue specificity:Widely expressed.,

Subcellular

Cell membrane ; Peripheral membrane protein ; Cytoplasmic side . Cytoplasm .

Nucleus . Early endosome membrane ; Peripheral membrane protein ;

Nucleus . Early endosome membrane ; Peripheral membrane protein ; Cytoplasmic side . Endosome membrane ; Peripheral membrane protein ;

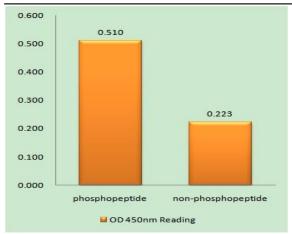
Cytoplasmic side . May be recruited to exosomes by NDFIP1

(PubMed:18819914). Localizes to plasma membrane upon CXCL12 stimulation where it co-localizes with CXCL4 (PubMed:14602072). Localization to early endosomes is increased upon CXCL12 stimulation where it co-localizes with

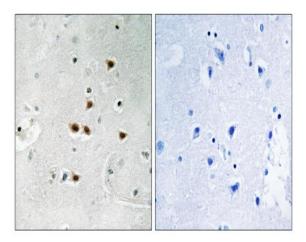
DTX3L and CXCL4 (PubMed:24790097). .

**Expression:** Widely expressed.

## **Products Images**



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using ITCH (Phospho-Tyr420) Antibody



Immunohistochemistry analysis of paraffin-embedded human brain, using ITCH (Phospho-Tyr420) Antibody. The picture on the right is blocked with the phospho peptide.