

Rabbit anti-Human STUB1/CHIP Polyclonal Antibody | anti-STUB1/CHIP antibody

Phospho-STUB1/CHIP (Ser19) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA329221	Rabbit	Human	ELISA, Immunohistochemistry

PRODUCT SYNONYMS

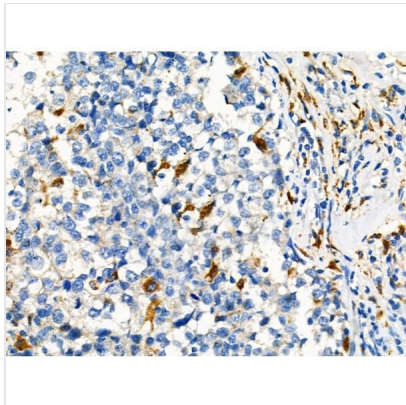
STUB1/CHIP; Polyclonal Antibody; Phospho-STUB1/CHIP (Ser19) Antibody; Antigen NY CO 7; Antigen NY-CO-7; C terminus of Hsp70-interacting protein; Carboxy terminus of Hsp70 interacting protein; Carboxy terminus of Hsp70-interacting protein; Carboxy terminus of Hsp70p interacting protein; CHIP; CHIP_HUMAN; CLL associated antigen KW 8; CLL-associated antigen KW-8; E3 ubiquitin protein ligase CHIP; E3 ubiquitin-protein ligase CHIP; Heat shock protein A binding protein 2 (c terminal); HSPABP2; NY CO 7; PP1131; SDCCAG7; Serologically defined colon cancer antigen 7; STIP1 homology and U Box containing protein 1; STIP1 homology and U box containing protein 1 E3 ubiquitin protein ligase; STIP1 homology and U box-containing protein 1; STUB 1; STUB1; UBOX 1; UBOX1; anti-STUB1/CHIP antibody

PRODUCT SPECIFICATIONS

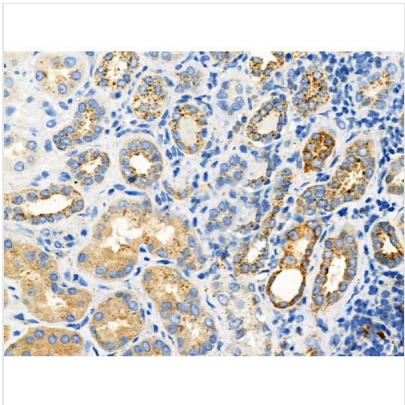
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Phospho-CHIP (Ser19) Antibody detects endogenous levels of CHIP only when phosphorylated at Ser19. Tissue Specificity: Expressed in differentiated myotubes (at protein level). Highly expressed in skeletal muscle, heart, pancreas, brain and placenta. Detected in kidney, liver and lung.
Purity/Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns.
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-STUB1/CHIP antibody	ELISA (Peptide ELISA), IHC (Immunohistochemistry)
Immunogen	A synthesized peptide derived from human CHIP around the phosphorylation site of Ser19.
Conjugation	Unconjugated
Fragment	Fab fragment
Post Translational Modifications	Monoubiquitinated at Lys-2 following cell stress by UBE2W, promoting the interaction with ATXN3 (By similarity). Auto-ubiquitinated; mediated by UBE2D1 and UBE2D2.
Subunit Structure	Homodimer (By similarity). Interacts with BAG2. Interacts with E2 ubiquitin conjugating enzymes UBE2D1, UBE2D2 and UBE2D3. Detected in a ternary complex containing STUB1, HSPA1A and HSPBP1. Interacts with MKKS. Interacts with DNAAF4. Interacts with POLB. Interacts (when monoubiquitinated) with ATXN3. Interacts with UBE2W. Interacts (via the U-box domain) with the UBE2V2-UBE2N heterodimer; the complex has a specific 'Lys-63'-linked polyubiquitination activity (By similarity). Interacts with DNAJB6. Interacts with FOXP3. Interacts with FLCN. Interacts with HSP90AA1. Interacts with HSP90. Interacts with UBE2N and UBE2V1. Interacts (via TPR repeats) with the C-terminal domain of HSPA1A. Interacts with the non-acetylated form of HSPA1A and HSPA1B. Interacts (via TPR repeats) with the C-terminal domain of HSPA8. Interacts with SMAD3 and HSP90AB1. Interacts with UBE4B. Interacts with RIPK3.
Similarity	The U-box domain is required for the ubiquitin protein ligase activity. The TPR domain is essential for ubiquitination mediated by UBE2D1.

Subcellular Location	Cytoplasm. Nucleus. Note: Translocates to the nucleus in response to inflammatory signals in regulatory T-cells (Treg).
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

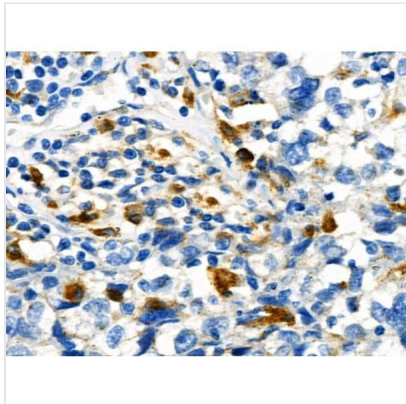
IMAGES



IHC (Immunohistochemisry)
At 1/100 staining Human mammary cancer by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohiostchemistry)
Staining Human kidney cancer and adjacent normal tissues by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemistry)
At 1/100 staining Human mammary cancer by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-STUB1/CHIP antibody	E3 ubiquitin-protein ligase which targets misfolded chaperone substrates towards proteasomal degradation. Collaborates with ATXN3 in the degradation of misfolded chaperone substrates: ATXN3 restricting the length of ubiquitin chain attached to STUB1/CHIP substrates and preventing further chain extension. Ubiquitinates NOS1 in concert with Hsp70 and Hsp40. Modulates the activity of several chaperone complexes, including Hsp70, Hsc70 and Hsp90. Mediates transfer of non-canonical short ubiquitin chains to HSPA8 that have no effect on HSPA8 degradation. Mediates polyubiquitination of DNA polymerase beta (POLB) at 'Lys-41', 'Lys-61' and 'Lys-81', thereby playing a role in base-excision repair: catalyzes polyubiquitination by amplifying the HUWE1/ARF-BP1-dependent monoubiquitination and leading to POLB-degradation by the proteasome. Mediates polyubiquitination of CYP3A4. Ubiquitinates EPHA2 and may regulate the receptor stability and activity through proteasomal degradation. Acts as a co-chaperone for HSPA1A and HSPA1B chaperone proteins and promotes ubiquitin-mediated protein degradation. Negatively regulates the suppressive function of regulatory T-cells (Treg) during inflammation by mediating the ubiquitination and degradation of FOXP3 in a HSPA1A/B-dependent manner. Likely mediates polyubiquitination and downregulates plasma membrane expression of PD-L1/CD274, an immune inhibitory ligand critical for immune tolerance to self and antitumor immunity. Negatively regulates TGF-beta signaling by modulating the basal level of SMAD3 via ubiquitin-mediated degradation. May regulate myosin assembly in striated muscles together with UBE4B and VCP/p97 by targeting myosin chaperone UNC45B for proteasomal degradation. Mediates ubiquitination of RIPK3 leading to its subsequent proteasome-dependent degradation.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	78099173
NCBI GeneID	10273
UniProt Accession #	Q9UNE7; O60526; Q969U2; Q9HBT1; A2IDB9
Molecular Weight	303
NCBI Official Full Name	E3 ubiquitin-protein ligase CHIP
NCBI Official Synonym Full Names	STIP1 homology and U-box containing protein 1, E3 ubiquitin protein ligase
NCBI Official Symbol	STUB1
NCBI Official Synonym Symbols	CHIP; UBOX1; SCAR16; HSPABP2; NY-CO-7; SDCCAG7
NCBI Protein Information	E3 ubiquitin-protein ligase CHIP; antigen NY-CO-7; CLL-associated antigen KW-8; serologically defined colon cancer antigen 7; carboxy terminus of Hsp70-interacting protein; heat shock protein A binding protein 2 (c-terminal)
UniProt Protein Name	E3 ubiquitin-protein ligase CHIP
UniProt Gene Name	STUB1
UniProt Entry Name	CHIP_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.