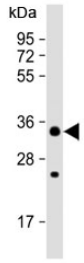
CHIP Antibody / STUB1 Rabbit Antibody (F40135)

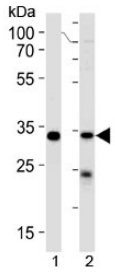
Catalog No.	Formulation	Size
F40135-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F40135-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

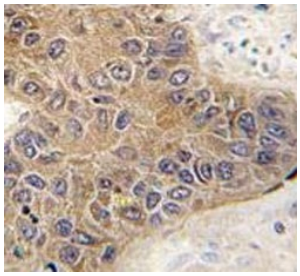
Availability	1-3 business days
Species Reactivity	Human
Predicted Reactivity	Mouse, Chicken
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	Q9UNE7
Localization	Cytoplasmic
Applications	Western blot: 1:1000 IHC (Paraffin): 1:50-1:100
Limitations	This CHIP Antibody / STUB1 Rabbit Antibody is available for research use only.



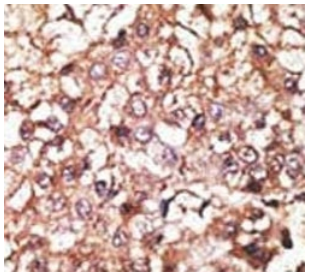
CHIP Antibody WB Analysis of Human MCF7 Cell Lysate. Western blot analysis of human MCF7 cell lysate using STUB1 Rabbit Antibody. An immunoreactive band is detected near 35 kDa, consistent with the predicted molecular weight of STUB1.



CHIP Antibody WB Analysis of HEK293 Cells and Human Placenta. Western blot analysis of HEK293 cell lysate (lane 1) and human placenta lysate (lane 2) using STUB1 Rabbit Antibody. A prominent immunoreactive band is detected near 35 kDa in both samples, consistent with the predicted molecular weight of STUB1. An additional band near 25 kDa is visible in the human placenta sample.



IHC analysis of FFPE human hepatocarcinoma tissue stained with STUB1 / CHIP antibody.



IHC analysis of FFPE human hepatocarcinoma stained with the STUB1 / CHIP antibody.

Description

CHIP Antibody / STUB1 Rabbit Antibody targets STUB1, commonly known as CHIP (C-terminus of Hsc70-interacting protein), an E3 ubiquitin ligase that connects molecular chaperone activity with the cellular machinery responsible for protein degradation. CHIP plays an important role in maintaining protein homeostasis by regulating the fate of proteins that interact with heat shock proteins. Its ability to coordinate chaperone binding and ubiquitination makes it a central component of cellular protein quality-control systems.

CHIP contains an N-terminal tetratricopeptide repeat (TPR) domain that recognizes the C-terminal regions of molecular chaperones, including HSP70 and HSP90. Through these interactions, CHIP associates with proteins undergoing folding, refolding, or quality-control assessment. Its C-terminal U-box domain facilitates interactions with ubiquitin-conjugating enzymes, enabling the transfer of ubiquitin to selected substrates. This combination of structural domains allows CHIP to function as both a cochaperone and an E3 ubiquitin ligase.

One of CHIP's principal functions is promoting the degradation of proteins that cannot achieve or maintain their proper conformation. By directing selected chaperone-associated substrates toward the ubiquitin-proteasome system, CHIP helps prevent the accumulation of potentially harmful proteins. Its activity is influenced by substrate characteristics, chaperone interactions, and the availability of other components of the ubiquitination machinery. CHIP also participates in regulatory processes extending beyond the removal of misfolded proteins, including the control of signaling proteins and transcription factors.

Cellular stress can increase the demand for protein quality-control mechanisms as proteins become susceptible to damage or misfolding. CHIP contributes to the response by helping coordinate chaperone-mediated substrate recognition with ubiquitin-dependent degradation. Its functions are particularly relevant to the maintenance of long-lived cells, including neurons, where impaired protein clearance can contribute to progressive cellular dysfunction. Alterations in STUB1 activity have been associated with neurological disease and disturbances in proteostasis.

CHIP Antibody provides a means of investigating this connection between molecular chaperones and ubiquitin-mediated protein turnover. Understanding CHIP regulation contributes to research on cellular stress adaptation, protein stability, and the mechanisms that maintain a functional proteome.

For an alternative antibody with knockout validation and broader experimental characterization, see our STUB1 Antibody targeting CHIP, an E3 ubiquitin ligase involved in cellular protein quality control.

Application Notes

Titration of the CHIP Antibody / STUB1 Rabbit Antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 203-231 from the human protein was used as the immunogen for this STUB1 / CHIP antibody.

Storage

Aliquot the STUB1 / CHIP antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

C-terminus of Hsc70-interacting protein antibody, C-terminus of Hsp70-interacting protein antibody, STUB1 antibody, STIP1 homology and U-box containing protein 1 antibody, STIP1 homology and U-box protein 1 antibody, E3 ubiquitin-protein ligase CHIP antibody, Carboxyl terminus of Hsc70-interacting protein antibody, CHIP E3 ubiquitin ligase antibody, CHIP cochaperone antibody, STUB1 protein quality control antibody

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