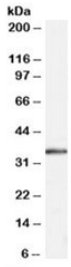
Goat Anti-CHIP Antibody / STUB1 Polyclonal Antibody (R33375)

Catalog No.	Formulation	Size
R33375-100UG	0.5 mg/ml in 1X TBS, pH7.3, with 0.5% BSA (US sourced) and 0.02% sodium azide	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Predicted Reactivity	Mouse, Rat, Dog, Cow
Format	Antigen affinity purified
Host	Goat
Clonality	Polyclonal (goat origin)
Isotype	Goat Ig
Purity	Antigen affinity
Gene ID	10273
Applications	Western blot: 0.3-1ug/ml ELISA (peptide) LOD: 1:64000
Limitations	This Goat Anti-CHIP Antibody / STUB1 Polyclonal Antibody is available for research use only.



Goat Anti-CHIP Antibody WB Analysis of Human Muscle Lysate. Western blot analysis of human muscle lysate using STUB1 Polyclonal Antibody at 0.3 ug/ml. A distinct immunoreactive band is detected near 35 kDa, consistent with the predicted molecular weight of STUB1.

Description

Goat Anti-CHIP Antibody / STUB1 Polyclonal Antibody targets STUB1, also known as CHIP (C-terminus of Hsc70-interacting protein), an E3 ubiquitin ligase that coordinates molecular chaperone activity with ubiquitin-dependent protein regulation. CHIP participates in cellular protein quality control by influencing whether chaperone-associated proteins undergo additional folding or are directed toward degradation. This function helps maintain proteostasis and limits the accumulation of damaged or improperly folded proteins.

The STUB1 protein contains an N-terminal tetratricopeptide repeat (TPR) domain and a C-terminal U-box domain. The TPR domain mediates interactions with molecular chaperones, including HSP70 and HSP90, while the U-box domain supports ubiquitin ligase activity through interactions with ubiquitin-conjugating enzymes. These domains allow CHIP to connect chaperone-associated substrate recognition with ubiquitination. CHIP also functions as a dimer, and its structural organization contributes to the regulation of substrate processing and protein turnover.

CHIP participates in the ubiquitination of selected proteins involved in cellular signaling, transcriptional regulation, and stress responses. Its activity is influenced by substrate conformation, chaperone interactions, and the availability of ubiquitination machinery. Although CHIP is frequently associated with proteasomal degradation, its regulatory functions extend beyond the elimination of misfolded proteins. Depending on the cellular context, STUB1-mediated ubiquitination can alter protein stability, localization, or interactions with other regulatory factors.

The importance of CHIP becomes particularly apparent under conditions that challenge protein folding and degradation systems. Heat stress, oxidative damage, and disturbances in protein homeostasis increase the demand for coordinated chaperone and ubiquitin ligase activity. CHIP contributes to these adaptive responses by helping regulate the turnover of selected chaperone-associated substrates. Its functions are also relevant to neuronal maintenance, where impaired protein quality control can contribute to progressive dysfunction. Pathogenic STUB1 variants have been associated with inherited neurological disorders, including spinocerebellar ataxia.

Goat Anti-CHIP Antibody provides a reagent for investigating the abundance and regulation of this chaperone-associated ubiquitin ligase. Studies of STUB1 contribute to understanding the balance between protein folding and degradation, the regulation of cellular stress responses, and the consequences of disrupted proteostasis.

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

Optimal dilution of the Goat Anti-CHIP Antibody / STUB1 Polyclonal Antibody should be determined by the researcher.

Immunogen

Amino acids DAFISENGWVEDY were used as the immunogen for this STUB1 / CHIP antibody.

Storage

Aliquot and store the STUB1 / CHIP antibody at -20oC.

Alternate Names

STUB1 antibody, CHIP antibody, C-terminus of Hsc70-interacting protein antibody, C-terminus of Hsp70-interacting protein 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, STUB1 ubiquitin ligase antibody

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