Data Sheet (Cat.No.TMAY-02372)

Anti-STUB1 Antibody (3D962)

Product Details

Ig Type:	Rabbit IgG
Reactivity:	Human
Conjugation:	Unconjugated
Clone:	3D962
Purification:	Protein A

Applications

Verified Activity:

1. Anti-STUB1 rabbit monoclonal antibody at 1:500 dilution.
-Lane A: HELA Whole Cell Lysate.
-Lane B: 293T Whole Cell Lysate.
-Lane C: MCF7 Whole Cell lysate.
-Lysates/proteins at 30 µg per lane.
-Secondary
-Goat Anti-Rabbit IgG H&L (Dylight800) at 1/10000 dilution.
-Developed using the Odyssey technique.
-Performed under reducing conditions.
-Predicted band size:35 kDa.
-Observed band size:36 kDa.
2. STUB1 was immunoprecipitated using:
-Lane A:0.5 mg Hela Whole Cell Lysate.
-Lane B:0.5 mg 293T Whole Cell Lysate.
-Lane C:0.5 mg MCF-7 Whole Cell Lysate.
-2 µL anti-STUB1 rabbit monoclonal antibody and 15 µl of 50 % Protein G agarose.
-Primary antibody:
-Anti-STUB1 rabbit monoclonal antibody, at 1:500 dilution.
-Secondary antibody:
-Dylight 800-labeled antibody to rabbit IgG (H+L), at 1:5000 dilution.
-Developed using the odyssey technique.
-Performed under reducing conditions.
-Predicted band size: 35 kDa.
-Observed band size: 35 kDa.
3. Immunofluorescence staining of STUB1 in MCF7 cells. Cells were fixed with 4% PFA, permeabilzed with 0.1% Triton X-100 in PBS,blocked with 10% serum, and incubated with rabbit anti-human STUB1 monoclonal antibody (dilution ratio 1:300) at 4°C overnight. Then cells were stained with the Alexa Fluor®488-conjugated Goat Anti-rabbit IgG secondary antibody (green). Positive staining was localized to Cytoplasm and Nucleus.
4. Flow cytometric analysis of Human STUB1 expression on Hela cells. The cells were treated according to manufacturer's manual (BD Pharmingen™ Cat. No. 554714), stained with purified anti-Human STUB1, then a FITC-conjugated second step antibody. The fluorescence histograms were derived from gated events with the forward and side light-scatter characteristics of intact cells.

Application:	ELISA,FCM,ICC/IF,IP,WB
Recommended	WB: 1:500-1:2000; ELISA: 1:5000-1:10000; ICC-IF: 1:100-1:500; FCM: 1:100-1:500; IP: 1-4 μL/mg of lysate

Properties

Stability & Storage:	Store at 2°C-8°C for 1 month. Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles. Preservative-Free.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	Recombinant Protein: Human STUB1 protein
Antigen Species:	Human
Synonyms:	Antigen NY-CO-7;CHIP;STIP1 Homology and U Box-Containing Protein 1;STUB1;CLL-Associated Antigen KW-8;Carboxy Terminus of Hsp70-Interacting Protein;E3 Ubiquitin-Protein Ligase CHIP
Biology Area:	Adaptor Proteins

Research Background

CHIP, the protein encoded by STUB1, is a central component of cellular protein homeostasis and interacts with several key proteins involved in the pathogenesis of manifold neurodegenerative diseases. Missense and truncating mutations in STUB1 lead to SCAR16. CHIP/STUB1 ubiquitin ligase is a negative co-chaperone for HSP90/HSC70, and its expression is reduced or lost in several cancers, including breast cancer. Pathogenic variants in STUB1 were initially described in autosomal recessive spinocerebellar ataxia type 16 and dominant cerebellar ataxia with cerebellar cognitive dysfunction (SCA48). Data indicated that STUB1 deficiency leads both to the intracellular accumulation of protein aggregates and to an increase in the secretion of small extracellular vesicles (sEVs), including exosomes. Secreted sEVs are enriched in ubiquitinated and/or undegraded proteins and protein oligomers.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481