

STAMPB (M-140): sc-98766

BACKGROUND

STAMPB (STAM binding protein), also known as AMSH, is a 424 amino acid protein belonging to the peptidase M67C family. Ubiquitously expressed, STAMPB functions as a zinc metalloprotease that specifically cleaves Lys 63-linked polyubiquitin chains. STAMPB is able to oppose the ubiquitin-dependent sorting of receptors to lysosomes. STAMPB may play a role in signal transduction for cell growth and Myc induction mediated by IL-2 and GM-CSF. It is suggested that STAMPB potentiates BMP (bone morphogenetic protein) signaling by antagonizing the inhibitory action of Smad6 and Smad7. STAMPB consists of the JAMM motif, which is essential for the protease activity, and is inhibited by N-ethylmaleimide.

REFERENCES

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2. McCullough, J., et al. 2004. AMSH is an endosome-associated ubiquitin isopeptidase. *J. Cell Biol.* 166: 487-492.
3. Li, H., et al. 2004. An RNF11: Smurf2 complex mediates ubiquitination of the AMSH protein. *Oncogene* 23: 1801-1808.
4. Herrera-Vigener, F., et al. 2006. AMSH regulates calcium-sensing receptor signaling through direct interactions. *Biochem. Biophys. Res. Commun.* 347: 924-930.
5. McCullough, J., et al. 2006. Activation of the endosome-associated ubiquitin isopeptidase AMSH by STAM, a component of the multivesicular body-sorting machinery. *Curr. Biol.* 16: 160-165.
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7. Agromayor, M., et al. 2006. Interaction of AMSH with ESCRT-III and deubiquitination of endosomal cargo. *J. Biol. Chem.* 281: 23083-23091.
8. Ma, Y.M., et al. 2007. Targeting of AMSH to endosomes is required for epidermal growth factor receptor degradation. *J. Biol. Chem.* 282: 9805-9812.

CHROMOSOMAL LOCATION

Genetic locus: STAMPB (human) mapping to 2p13.1; Stambp (mouse) mapping to 6 C3.

SOURCE

STAMPB (M-140) is a rabbit polyclonal antibody raised against amino acids 131-270 mapping within an internal region of STAMPB of mouse origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

STAMPB (M-140) is recommended for detection of STAMPB of mouse, rat and, to a lesser extent, human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for STAMPB siRNA (h): sc-94512, STAMPB siRNA (m): sc-153875, STAMPB shRNA Plasmid (h): sc-94512-SH, STAMPB shRNA Plasmid (m): sc-153875-SH, STAMPB shRNA (h) Lentiviral Particles: sc-94512-V and STAMPB shRNA (m) Lentiviral Particles: sc-153875-V.

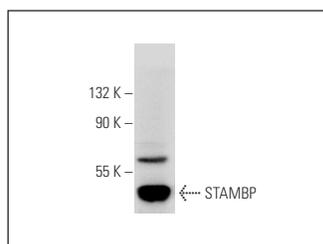
Molecular Weight of STAMPB: 50 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210.

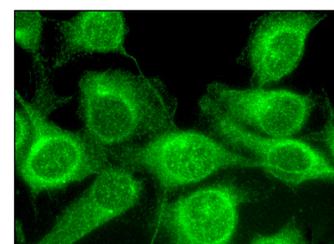
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



STAMPB (M-140): sc-98766. Western blot analysis of STAMPB expression in HeLa whole cell lysate.



STAMPB (M-140): sc-98766. Immunofluorescence staining of methanol-fixed NIH/3T3 cells showing cytoplasmic and nuclear localization.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

MONOS
Satisfaction
Guaranteed

Try **STAMPB (H-4): sc-271641** or **STAMPB (C-1): sc-398480**, our highly recommended monoclonal alternatives to STAMPB (M-140).