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Product Information

Anti-AMSH-LP / STAMBPL1 antibody, Mouse monoclonal
clone AMSH-LP-4, purified from hybridoma cell culture

Catalog Number **SAB4200395**

Product Description

Monoclonal Anti-AMSH-LP /STAMBPL1 (mouse IgG1 isotype) is derived from the hybridoma AMSH-LP-4 produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with a synthetic peptide corresponding to a sequence at the C-terminal region of human STAMBPL1 (GeneID: 57559), conjugated to KLH. The corresponding sequence is identical in mouse, rat monkey, bovine and canine STAMBPL1. The isotype is determined by ELISA using Mouse Monoclonal Antibody Isotyping Reagents, Catalog Number ISO2. The antibody is purified from culture supernatant of hybridoma cells grown in a bioreactor.

Monoclonal Anti-AMSH-LP /STAMBPL1 recognizes human AMSH-LP /STAMBPL1. The antibody may be used in various immunochemical techniques including immunoblotting (~50 kDa). Detection of the AMSH-LP /STAMBPL1 band by immunoblotting is specifically inhibited by the immunizing peptide.

AMSH-LP (AMSH-like protein), also known as STAMBPL1, is a close homolog of AMSH (Associated Molecule with the SH3 domain of STAM). AMSH and AMSH-LP belong to the JAMM domain metalloprotease family of Zn^{2+}-dependent deubiquitinating enzymes (DUBs). Both proteins are involved in the deubiquitination of endosomal proteins and specifically cleave K-63-linked polyubiquitin chains. Similarly to AMSH, AMSH-LP contains a nuclear localization signal (NLS), an Mpr/Pad1/N-terminal (MPN) domain, and a Jab1/MPN domain metalloenzyme (JAMM) motif. AMSH-LP like AMSH, interacts with clathrin heavy chain and this interaction is essential for its endosomal localization. However, AMSH-LP unlike AMSH, fails to bind to the SH3 domain of STAM, suggesting that they are not functionally redundant. AMSH-LP positively regulates TGF-β signaling through interaction with inhibitory I-SMADs.[1-5]

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody Concentration: ~ 1.0 mg/mL

Precautions and Disclaimer

For R&D use only. Not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

For continuous use, store at 2-8 °C for up to one month. For extended storage, freeze at −20 °C in working aliquots. Repeated freezing and thawing, or storage in “frost-free” freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working antibody concentration of 1-2 μg/mL is recommended using whole cell extracts of HEK-293T cells over-expressing AMSH-LP /STAMBPL1.

Note: In order to obtain the best results using various techniques and preparations, we recommend determining optimal working dilutions by titration.

References

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2. Ibarrola, N., et al., *BMC Cell Biol.*, **5**:2 (2004).
3. Nakamura, M., et al., *Genes Cells*, **11**, 593-606 (2006).
4. Sato, Y., et al., *Nature*, **455**, 358-362 (2008).
5. Sacco, J.J., et al., *IUBMB Life*, **62**, 140-157 (2010).

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