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Product Information

Anti-AMSH-LP/STAMBPL1 (C-terminal)
produced in rabbit, affinity isolated antibody

Product Number **SAB4200146**

Product Description

Anti-AMSH-LP/STAMBPL1 (C-terminal) is produced in rabbit using as the immunogen a synthetic peptide corresponding to a fragment of human AMSH-LP /STAMBPL1 (GeneID: 57559), conjugated to KLH. The corresponding sequence is identical in mouse, rat, monkey, bovine, and canine AMSH-LP /STAMBPL1. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-AMSH-LP/STAMBPL1 (C-terminal) recognizes human, mouse, and rat AMSH-LP/STAMBPL1. The antibody may be used in several immunochemical techniques including immunoblotting (~50 kDa) and immunofluorescence. 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.

Similar 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.

Antibody concentration: ~1.0 mg/mL

Precautions and Disclaimer

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

Storage/Stability

Store at −20 °C. For continuous use, store at 2–8 °C for up to one month. For extended storage, freeze 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 dilutions should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working antibody concentration of 2.5-5.0 μg/mL is recommended using whole extracts of mouse NIH-3T3 cells and 5-10 μg/mL using whole extracts of rat NRK cells.

Indirect Immunofluorescence: a working antibody concentration of 5-10 μg/mL is recommended using human HeLa cells.

Note: In order to obtain best results in various techniques and preparations, it is recommended to determine 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).
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