

Product Information

Monoclonal Anti-Leupaxin, clone Leu133

produced in mouse, tissue culture supernatant

Catalog Number **SAB4200301**

Product Description

Monoclonal Anti-Leupaxin (mouse IgM isotype) is derived from the hybridoma Leu133 produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with a peptide corresponding to a sequence at the N-terminus human Leupaxin (GeneID: 9404), conjugated to KLH. The corresponding sequence is identical in human leupaxin 1 and 2 isoforms. The isotype is determined using a double diffusion immunoassay 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-Leupaxin recognizes human, monkey and mouse Leupaxin. The antibody may be used in various immunochemical techniques including, immunoblotting (~ 43 kDa) and immunocytochemistry. Staining of the leupaxin band in immunoblotting and immunocytochemistry is specifically inhibited with the immunizing protein.

Leupaxin is a LIM domain phosphotyrosine protein preferentially expressed in lymphoid tissues and hematopoietic cells. Leupaxin shares homology with the focal adhesion protein paxillin, in the LIM and LD protein interaction domains.¹ LIM domains have been shown to mediate localization to focal contacts and LD motifs have been implicated in focal adhesion kinase (FAK) and vinculin binding, resulting in the localization of FAK to focal adhesions. Leupaxin is expressed in cell types that lack FAK, such as human macrophages. It has been shown to associate with a second FAK family member PYK2.¹ Leupaxin and PYK2 are both preferentially expressed in leukocytes where they regulate cell type-specific signaling complex. This protein is also a substrate for a tyrosine kinase in lymphoid cells and thus may function in, and be regulated by, tyrosine kinase activity. Leupaxin can form a complex with PYK2 and PTP-PEST in several cell types including monocytes and osteoclasts and in prostate cancer cells.²⁻⁴ In osteoclasts, leupaxin has been suggested to be a critical nucleating component of the osteoclast podosomal signaling complex in the adhesion zone.⁴ Leupaxin is expressed in prostate

cancer and is thought to play a role in adhesion and invasion of prostate carcinoma cells.⁵⁻⁶

Reagent

Supplied as a culture supernatant solution containing 15 mM sodium azide as a preservative. The product contains fetal calf serum.

Precautions and Disclaimer

This product is 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 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 dilution of 1:8000-1:16,000 using human Ramos cell extracts.

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

References

1. Lipsky, B.P., et al., *J. Biol. Chem.*, **273**, 11709-11713 (1998).
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3. Sahu, S.N., et al., *Am. J. Physiol. Cell Physiol.*, **292**, C2288-C2296 (2007).
4. Gupta, A., *J. Bone Miner. Res.*, **18**, 669-685 (2003).
5. Kaulfuss, S., et al., *Mol. Endocrinol.*, **22**, 1606-1621 (2008).
6. Kaulfuss, S., et al., *Oncogene.*, **28**, 3971-3982 (2009).

GG,TD,KAA,PHC 08/11-1

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