

Product Information

Anti-PLAUR/uPAR antibody, Mouse monoclonal
clone PL231, purified from hybridoma cell culture

Catalog Number **SAB4200412**

Product Description

Monoclonal Anti-PLAUR/uPAR (mouse IgG1 isotype) is derived from the hybridoma PL231 produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with a peptide corresponding to a sequence at the C-terminus of human PLAUR/uPAR (GeneID: 5329). 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-PLAUR/uPAR recognizes human, monkey, dog, rat and mouse PLAUR/uPAR. The antibody may be used in various immunochemical techniques including immunoblotting (~ 55kDa) and immunofluorescence.

The urokinase plasminogen activator (uPA) system plays a role in processes important to tumor progression including angiogenesis, tumor growth, and metastasis. This system is composed of a serine protease (uPA), its glycolipid (glycosylphosphatidylinositol) anchored receptor (uPAR), and several serine protease inhibitors (serpins) including plasminogen activator inhibitors 1 and 2 (PAI-1 and PAI-2).¹ PLAUR/uPAR (also known as CD87) acts as a receptor for urokinase plasminogen activator. Interestingly, another important uPAR ligand is Vitronectin. The binding of uPA and vitronectin to uPAR is not mutually exclusive and uPA stimulates vitronectin binding to uPAR. Given its role in localizing and promoting plasmin formation, uPAR influences many normal and pathological processes related to cell-surface plasminogen activation, degradation of the extracellular matrix, cell migration, leukocyte adhesion, chemotaxis and signal transduction during leukocyte recruitment from the circulation to extravascular sites of inflammation.² Indeed, uPAR has been implicated as an anti-cancer target.³ Its involvement has also been established in epilepsy, language, cognition, communication and central nervous system disorders.⁴

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: ~ 1.5 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 concentration of 4.0-8.0 µg/mL is recommended using extracts of HL-60 cells.

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

References

1. Mazar, A.P., *Clin. Cancer Res.*, **14**, 5649-5655 (2008).
2. Béné, M.C., et al., *Leukemia*, **18**, 394-400 (2004).
3. Lund, I.K., et al., *Curr. Drug Targets*, **12**, 1744-1760 (2011).
4. Bruneau, N., and Szepietowski, P., *Curr. Pharm. Des.*, **17**, 1915-1923 (2011).

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