

Polyclonal Anti-PLAUR Antibody

Catalog Number: PA1344

Description

Gene Name	plasminogen activator, urokinase receptor
Recommended Protein Name	Urokinase plasminogen activator surface receptor
Lot No.	0131212024431
Size	100µg/vial
Form	lyophilized
Ig type	Rabbit IgG
Specificity	No cross reactivity with other proteins.
Purification	Immunogen affinity purified.
Species	Reacts with: human
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human PLAUR(293-304aa CNHPDLDVQYRS).
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg NaN ₃ .

Application

	Concentration	Tested Species	Predicted Species	Antigen Retrieval
Western blot	0.1-0.5µg/ml	Hu	-	-
Immunohistochemistry (Paraffin-embedded Section)	0.5-1 µg/ml	Hu	-	By Heat

Tested Species: In-house tested species with positive results.

Predicted Species: Species predicted to be fit for the product based on sequence similarities.

By Heat: Boiling the paraffin sections in 10mM citrate buffer, pH6.0, for 20mins is required for the staining of formalin/paraffin sections.

Other applications have not been tested.

Optimal dilutions should be determined by end users.

Preparation and storage

Reconstitution: 0.2ml of distilled water will yield a concentration of 500µg/ml.

Storage: At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time.

Avoid repeated freezing and thawing.

Relevant detection systems

Boster provides a series of assays reacted with primary antibodies. Antibody can be supported by chemiluminescence kit EK1002 in WB, supported by SA1022 in IHC(P).

Background

PLAUR (PLASMINOGEN ACTIVATOR RECEPTOR, UROKINASE-TYPE), also known as UPAR or CD87, is multidomain glycoprotein tethered to the cell membrane with a glycosylphosphatidylinositol (GPI) anchor. PLAUR consists of three different domains of the Ly-6/uPAR/alpha-neurotoxin family. PLAUR is originally identified as a saturable binding site for urokinase on the cell surface. And the gene plays an important role in many normal as well as pathologic processes. The PLAUR gene is localized to 19q13.31. PLAUR is a part of the plasminogen activation system, which in the healthy body is involved in tissue reorganization events such as mammary gland involution and wound healing. PLAUR binds urokinase and thus restricts plasminogen activation to the immediate vicinity of the cell membrane. Thus it seems to be an important player in the regulation of this process. In human coronary artery vascular smooth muscle cells, UPA stimulates cell migration via a UPAR signaling complex containing TYK2 and phosphatidylinositol 3-kinase.

Reference

1. Borglum, A., Anette, B., Roldan, A. L., Blasi, F., Bolund, L., Kruse, T. A. Assignment of the gene for urokinase-type plasminogen activator receptor to chromosome 19q13.
2. Borglum, A. D., Byskov, A., Ragno, P., Roldan, A. L., Tripputi, P., Cassani, G., Dano, K., Blasi, F., Bolund, L., Kruse, T. A. Assignment of the urokinase-type plasminogen activator receptor gene (PLAUR) to chromosome 19q13.1-q13.2. *Am. J. Hum. Genet.* 50: 492-497, 1992.
3. Llinas P, Le Du MH, Gårdsvoll H, et al. (May 2005). "Crystal structure of the human urokinase plasminogen activator receptor bound to an antagonist peptide".