

PLAUR Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP8156c

Product Information

Application	IHC-P, WB, E
Primary Accession	Q03405
Other Accession	Q9GK78
Reactivity	Human
Predicted	Monkey
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB4065/4066
Calculated MW	36978
Antigen Region	136-166

Additional Information

Gene ID	5329
Other Names	Urokinase plasminogen activator surface receptor, U-PAR, uPAR, Monocyte activation antigen Mo3, CD87, PLAUR, MO3, UPAR
Target/Specificity	This PLAUR antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 136-166 amino acids from the Central region of human PLAUR.
Dilution	IHC-P~~1:100~500 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	PLAUR Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PLAUR
Synonyms	MO3, UPAR

Function	Acts as a receptor for urokinase plasminogen activator (PubMed: 15677461). Plays a role in localizing and promoting plasmin formation. Mediates the proteolysis-independent signal transduction activation effects of U-PA. It is subject to negative-feedback regulation by U-PA which cleaves it into an inactive form.
Cellular Location	Cell membrane. Cell projection, invadopodium membrane Note=Colocalized with FAP (seprase) preferentially at the cell surface of invadopodia membrane in a cytoskeleton-, integrin- and vitronectin- dependent manner. [Isoform 2]: Secreted {ECO:0000250 UniProtKB:P49616}
Tissue Location	Expressed in neurons of the rolandic area of the brain (at protein level). Expressed in the brain

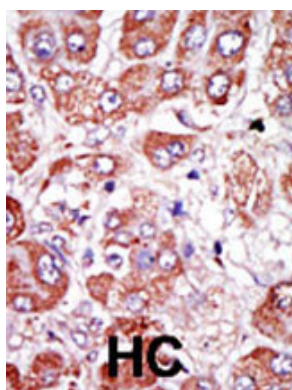
Background

The urokinase-type plasminogen activator receptor is a key molecule in the regulation of cell-surface plasminogen activation and plays an important role in many normal as well as pathologic processes. The human PLAUR cDNA encodes 335 amino acids including a predicted signal peptide of 22 residues and a hydrophobic C-terminal portion.¹ It produces a highly glycosylated protein of about 50 kD in monocytes where it is anchored to the plasma membrane by glycosyl-phosphatidylinositol linkage. PLAUR, also known as UPAR, is directly associated with the carbohydrate-binding domain of SELL in the membrane of neutrophils, an association analogous to that between PLAUR and beta-2 integrins.² PLAUR-mediated calcium mobilization is SELL dependent. UPAR mRNA levels correlate with the invasive potential of endometrial carcinomas and show a 33-fold increase in UPAR mRNA levels in advanced clinical stage endometrial tumors compared with normal endometrial tissue.³ Furthermore, the increase in UPAR mRNA levels correlated linearly with the progression of disease stage. UPAR protein expression correlated positively with rate of recurrence and mortality in patients with endometrial cancer.⁴ UPAR appears to be a useful prognostic marker for advanced endometrial cancer.

References

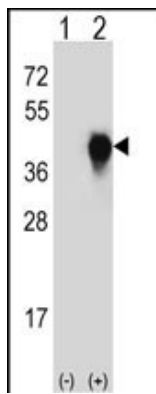
Borgfeldt, C., et al., *Int. J. Cancer* 107(4):658-665 (2003).
Tran, H., et al., *Mol. Cell. Biol.* 23(20):7177-7188 (2003).
Coleman, J.L., et al., *Infect. Immun.* 71(10):5556-5564 (2003).
Sturge, J., et al., *J. Cell Biol.* 162(5):789-794 (2003).
Li, Y., et al., *J. Biol. Chem.* 278(32):29925-29932 (2003).

Images

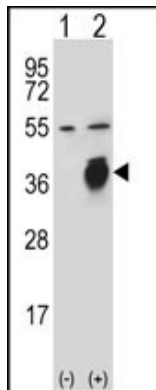


Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

Western blot analysis of PLAUR (arrow) using rabbit polyclonal PLAUR Antibody (W151) (Cat. #AP8156c). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or



transiently transfected (Lane 2) with the PLAUR gene.



Western blot analysis of PLAUR (arrow) using rabbit polyclonal PLAUR Antibody (W151) (Cat. #AP8156c). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the PLAUR gene.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.