

BACKGROUND

The urokinase plasminogen activator receptor (uPAR, or PLAUR) has been implicated in the growth, metastasis, and angiogenesis of several solid and hematologic malignancies. uPAR/PLAUR is part of a cell surface system that also consists of the serine protease uPA and several specific inhibitors (plasminogen activator inhibitors 1 and 2).¹ This system has classically been thought to drive tumor progression by mediating directed extracellular proteolysis on the surface of migrating or invading cells. uPA can bind to uPAR/PLAUR leading to the subsequent activation of plasminogen to plasmin. Plasmin is a promiscuous protease that initiates several extracellular proteolytic cascades. The binding of uPA to uPAR/PLAUR increases the efficiency of plasminogen activation and also serves to localize these proteolytic cascades to the migrating or invading edge of cells. This proteolysis is tightly controlled by PAI-1 and PAI-2, and the PAI-uPA-uPAR/PLAUR complex can be internalized with uPAR/PLAUR being recycled to the cell surface.² Thus, uPA, uPAR/PLAUR, and PAI-1 can all potentially be targeted for cancer therapy. In addition to mediating proteolysis, this receptor appears to also mediate cell signaling, proliferation, and survival.

References:

1. Blasi, F. & Carmeliet, P.: Nat. Rev. Mol. Cell. Biol. 3:932-43, 2002
2. Mazar, A.P. : Clin Cancer Res. 14:5649-55, 2008

TECHNICAL INFORMATION

Source:

uPAR/PLAUR Antibody is a rabbit antibody raised against a short peptide from human uPAR/PLAUR sequence.

Specificity and Sensitivity:

This antibody detects endogenous levels of uPAR/PLAUR proteins without cross-reactivity with other related proteins.

Storage Buffer: PBS and 30% glycerol

Storage:

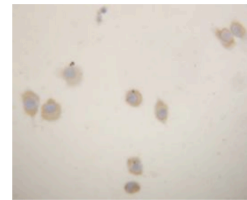
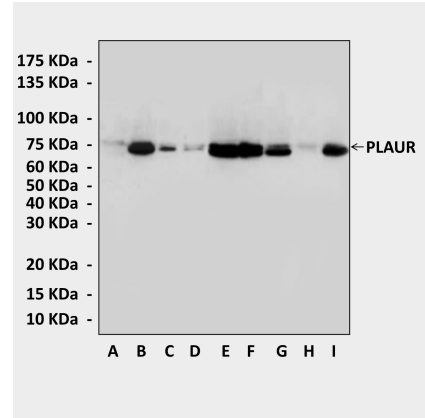
Store at -20°C for at least one year. Store at 4°C for frequent use. Avoid repeated freeze-thaw cycles.

APPLICATIONS

Application:	*Dilution:
WB	1:1000
IP	n/d
IHC	1:50-200
ICC	1:50-200
FACS	n/d

**Optimal dilutions must be determined by end user.*

QUALITY CONTROL DATA



Top: Western Blot detection of uPAR/PLAUR proteins in human placenta tissue (A), rat brain tissue (B), rat thymus tissue (C), rat heart tissue (D), MCF-7 whole cell (E), smmc whole cell (F), HeLa whole cell (G), Raji whole cell (H), and colo320 whole cell (I) lysates using uPAR/PLAUR Antibody. **Bottom:** This antibody stains MCF-7 cells in immunocytochemical analysis.

