

# Active Recombinant Human PLAUR protein, His/Avi-tagged, Biotinylated

**Cat. No.** PLAUR-051H    **Lot. No.** (See product label)

## SPECIFICATION

### Product Overview

Biotinylated Recombinant Human PLAUR(Leu23-Arg303) protein, fused to His/Avi tag at the C-terminus, was expressed in HEK293 cells .

### Species

Human

### Source

HEK293

### ProteinLength

Leu23-Arg303

### Description

The plasminogen activator, urokinase receptor (PLAUR) is one of two activators that converts the extracellular zymogen plasminogen to plasmin, a serine protease that is involved in a variety of normal and pathological processes that require cell migration and/or tissue destruction. uPA is synthesized and released from cells as a single-chain (sc) pro-enzyme with limited enzymatic activity and is converted to an active two-chain (tc) disulfide-linked active enzyme by plasmin and other specific proteinases. Both the scuPA and tcuPA bind with high-affinity to the cell surface via the glycosyl phosphatidylinositol-linked receptor uPAR which serves to localize the uPA proteolytic activity. The enzymatic activity of scuPA has also been shown to be enhanced by binding to uPAR. Independent of their proteolytic activity, the uPA/uPAR interaction also initiates signal transduction responses resulting in activation of protein tyrosine kinases, gene expression, cell adhesion, and chemotaxis. uPAR can interact with integrins to suppress normal integrin adhesive function and promote adhesion to vitronectin through a high affinity vitronectin binding site on uPAR. uPAR cDNA

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encodes a 335 amino acid (aa) residue precursor protein with a 22 aa residue signal peptide, five potential N-linked glycosylation sites and a C-terminal GPI-anchor site. An alternate spliced variant of uPAR encoding a secreted soluble form of uPAR also exists. Human and mouse uPAR share approximately 60% aa sequence identity and the receptor-ligand interaction is strictly species-specific.

**Predicted N Terminal** Leu23

**Form** Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose.

**Bio-activity** Measured by its binding ability in a functional ELISA. When Recombinant Human u-Plasminogen Activator (uPA)/Urokinase is immobilized at 5 µg/mL (100 µL/well), the concentration of Recombinant Human PLAUR His-tag Avi-tag that produces 50% of the optimal binding response is 40-240 ng/mL.

**Molecular Mass** 47-54 kDa, under reducing conditions

**Endotoxin** <0.10 EU per 1 µg of the protein by the LAL method.

**Purity** >95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.

**Applications** Bioactivity

**Storage** Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 3 months, -20 to -70 °C under sterile conditions after reconstitution.

**Reconstitution** Reconstitute at 1 mg/mL in PBS.

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**Conjugation**                      Biotin

## GENE INFORMATION

**Gene Name**                      PLAUR plasminogen activator, urokinase receptor [ Homo sapiens ]

**Official Symbol**                PLAUR

**Synonyms**                      PLAUR; plasminogen activator, urokinase receptor; urokinase plasminogen activator surface receptor; CD87; UPAR; URKR; urokinase type plasminogen activator (uPA) receptor; monocyte activation antigen Mo3; u-plasminogen activator receptor form 2; urokinase-type plasminogen activator (uPA) receptor; U-PAR;

**Gene ID**                            5329

**mRNA Refseq**                  NM\_001005376

**Protein Refseq**                 NP\_001005376

**MIM**                                173391

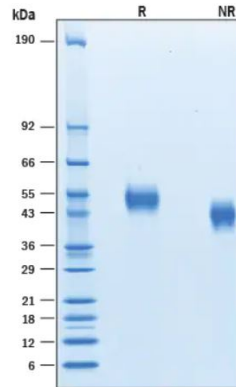
**UniProt ID**                        Q03405

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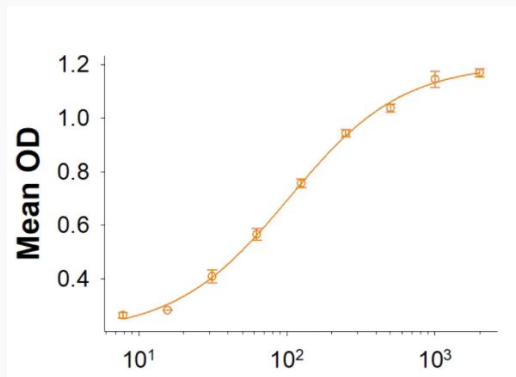
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### SDS-PAGE




2  $\mu$ g/lane Protein was resolved with SDS-PAGE under reducing (R) and non-reducing (NR) conditions and visualized by Coomassie<sup>®</sup> Blue staining.

### Binding Activity



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