



# Recombinant Protein Technical Manual

## Recombinant Human uPAR Protein (His Tag)

RPES3351

### Product Data:

**Product SKU:** RPES3351

**Size:** 10µg

**Species:** Human

**Expression host:** Human Cells

**Uniprot:** Q03405

### Protein Information:

**Molecular Mass:** 32.6 kDa

**AP Molecular Mass:** 52 kDa

**Tag:** C-6His

**Bio-activity:**

**Purity:** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per µg as determined by the LAL method.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from a 0.2 µm filtered solution of 20mM PB, 150mM NaCl, pH 7.2.

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** Urokinase Plasminogen Activator Surface Receptor; U-PAR; uPAR; Monocyte activation antigen; Mo3; CD87; PLAUR; MO3; UPAR

## Immunogen Information:

**Sequence:** Leu23-Arg303

## Background:

The Urokinase Type Plasminogen Activator (uPA) receptor (uPAR) is a widely expressed receptor for urokinase plasminogen activator (uPA) and pro-uPA. uPAR / CD87 is a highly glycosylated, 55-60kDa integral membrane protein linked to the plasma membrane by a glycosylphosphatidylinositol (GPI) anchor. uPAR is expressed by T-cells, NK cells, monocytes, and neutrophils as well as non-hematopoietic cells that include vascular endothelial cells, fibroblasts, smooth muscle cells, keratinocytes, placental trophoblasts, hepatocytes, and a wide variety of tumor cells (including breast, colon, and prostate carcinoma, melanoma). It plays a critical role in the regulation of cell-surface plasminogen activation in physiological and pathological conditions, and it is also involved in cellular adhesion, the transmission of extracellular signals across the plasma membrane and the subsequent regulation of gene expression. uPAR has been implicated in several biological processes including angiogenesis, monocyte migration, cancer metastasis, trophoblast implantation, and wound healing. Human uPAR is encoded as a 313 amino acid residue polypeptide, excluding a 22 residue signal peptide and shows 60-70% similarity with the murine uPAR amino acid sequence although binding of uPA to uPAR shows strong species specificity.