



# Recombinant Protein Technical Manual

## Recombinant Human EPCR Protein (His Tag)

RPES1473

### Product Data:

**Product SKU:** RPES1473

**Size:** 10µg

**Species:** Human

**Expression host:** Human Cells

**Uniprot:** Q9UNN8

### Protein Information:

**Molecular Mass:** 23.1 kDa

**AP Molecular Mass:** 35 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:** Endothelial Protein C Receptor; Activated Protein C Receptor; APC Receptor; Endothelial Cell Protein C Receptor; CD201; PROCR; EPCR

## Immunogen Information:

**Sequence:** Ser18-Ser210

## Background:

Endothelial Protein C Receptor (EPCR) is a Vitamin K-dependent Serine Protease that plays a major role in blood coagulation. Binding of Protein C to EPCR leads to the proteolytic activation of PAR1 (Protease-Activated Receptor 1) on endothelial cells and subsequent up-regulation of Protein C-induced genes. EPCR is a type I transmembrane glycoprotein in the CD1/MHC family. It is expressed most strongly in the endothelial cells of arteries and veins in heart and lung. Membrane bound EPCR is released by metalloproteolytic cleavage to generate the soluble receptor. The extracellular domain of human and mouse EPCR shares approximately 61% amino acid sequence homology. EPCR plays an important role in augmenting Protein C activation by the Thrombin-Thrombomodulin complex and in regulating blood coagulation and inflammation. EPCR is found primarily on endothelial cells. Deletion of EPCR function results in embryonic death, at least in part due to placental thrombosis.