

Recombinant Protein Technical Manual Recombinant Human EPCR Protein (His Tag)

RPES0288

Product Data:

Product SKU: RPES0288 **Size:** 20μg

Species: Human Expression host: HEK293 Cells

Uniprot: Q9UNN8

Protein Information:

Molecular Mass: 23.4 kDa

AP Molecular Mass:

Tag: C-His

Bio-activity:

Purity: > 97 % as determined by reducing SDS-PAGE.

Endotoxin: $< 1.0 \text{ EU per } \mu\text{g}$ of the protein 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 sterile PBS, pH 7.4

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: Met 1-Thr 209

Background:

Endothelial protein C receptor (EPCR), also known as activated protein C receptor (APC receptor) or PROCR, is a receptor for Protein C. Protein C plays an important role in many metabolism processes in humans and other animals after activated by binding to Endothelial protein C receptor (EPCR). Because of the EPCR is found primarily on endothelial cells (cells on the inside of blood vessels), activated protein C is found maily near endothelial cells. Protein C is pleiotropic, with two main functions: anticoagulation and cytoprotection. Which function will be performed depend on whether or not protein C remains bind to EPCR after activated. The anticoagulation occurs when it does not. In this case, protein C functions as an anticoagulant by irreversibly proteolytically inactivating Factor Va and Factor VIIIa, turning them into Factor Vi and Factor VIIIi respectively. When still bound to EPCR, activated protein C performs its cytoprotective effects, acting on the effector substrate PAR, protease-activated receptor. To a degree, APC's anticoagulant properties are independent of its cytoprotective ones, in that expression of one pathway is not affected by the existence of the other.