

## Recombinant Rat EPCR Protein (His Tag)

Catalog No. PKSR030205

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

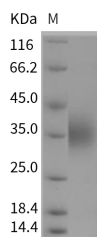
### Description

<b>Synonyms</b>	PROCR
<b>Species</b>	Rat
<b>Expression Host</b>	HEK293 Cells
<b>Sequence</b>	Met1-Ser213
<b>Accession</b>	Q4V8I1
<b>Calculated Molecular Weight</b>	23.2 kDa
<b>Observed molecular weight</b>	33-37 kDa
<b>Tag</b>	C-His
<b>Bioactivity</b>	Not validated for activity

### Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, 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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

### Data



> 95 % as determined by reducing SDS-PAGE.

### 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

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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 mainly near endothelial cells. Protein C is pleiotropic, with two main functions: anticoagulation and cytoprotection. Which function will be performed depends on whether or not protein C remains bound 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-1, protease-activated receptor-1. 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.