

Recombinant Human EPO-R protein ab211321

1 Image

Description

Product name	Recombinant Human EPO-R protein
Purity	> 95 % SDS-PAGE. Affinity purified
Endotoxin level	< 1.000 Eu/μg
Expression system	Insect cells
Accession	<u>P19235</u>
Protein length	Protein fragment
Animal free	No
Nature	Recombinant
Species	Human
Sequence	APPPNLPDPKFESKAALLAARGPEELLCFTERLEDLVCF WEEAASAGVGP GNYSFSYQLEDEPWKLCRLHQAPTARGAVRFWCSLPTA DTSSFVPLELRV TAASGAPRYHRVIHINEVVLLDAPVGLVARLADESGHVVL RWLPPPETPM TSHIRYEVDSAGNGAGSVQRVEILEGRTECVLSNLRGRT RYTF AVRARM AEPSFGGFWSAWSEPVSLTSPDLDPHHHHHH
Predicted molecular weight	26 kDa including tags
Amino acids	25 to 250
Tags	His tag C-Terminus
Additional sequence information	NP_000112.

Specifications

Our **Abpromise guarantee** covers the use of **ab211321** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	SDS-PAGE
Form	Liquid
Additional notes	Previously labelled as EPO Receptor.

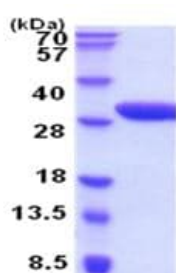
Preparation and Storage

Stability and Storage	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle. pH: 7.40 Constituents: 90% PBS, 10% Glycerol (glycerin, glycerine)
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General Info

Function	Receptor for erythropoietin. Mediates erythropoietin-induced erythroblast proliferation and differentiation. Upon EPO stimulation, EPOR dimerizes triggering the JAK2/STAT5 signaling cascade. In some cell types, can also activate STAT1 and STAT3. May also activate the LYN tyrosine kinase. Isoform EPOR-T acts as a dominant-negative receptor of EPOR-mediated signaling.
Tissue specificity	Erythroid cells and erythroid progenitor cells. Isoform EPOR-F is the most abundant form in EPO-dependent erythroleukemia cells and in late-stage erythroid progenitors. Isoform EPOR-S and isoform EPOR-T are the predominant forms in bone marrow. Isoform EPOR-T is the most abundant from in early-stage erythroid progenitor cells.
Involvement in disease	Defects in EPOR are the cause of erythrocytosis familial type 1 (ECYT1) [MIM:133100]. ECYT1 is an autosomal dominant disorder characterized by increased serum red blood cell mass, elevated hemoglobin and hematocrit, hypersensitivity of erythroid progenitors to erythropoietin, erythropoietin low serum levels, and no increase in platelets nor leukocytes. It has a relatively benign course and does not progress to leukemia.
Sequence similarities	Belongs to the type I cytokine receptor family. Type 1 subfamily. Contains 1 fibronectin type-III domain.
Domain	The WSXWS motif appears to be necessary for proper protein folding and thereby efficient intracellular transport and cell-surface receptor binding. The box 1 motif is required for JAK interaction and/or activation. Contains 1 copy of a cytoplasmic motif that is referred to as the immunoreceptor tyrosine-based inhibitor motif (ITIM). This motif is involved in modulation of cellular responses. The phosphorylated ITIM motif can bind the SH2 domain of several SH2-containing phosphatases.
Post-translational modifications	On EPO stimulation, phosphorylated on C-terminal tyrosine residues by JAK2. The phosphotyrosine motifs are also recruitment sites for several SH2-containing proteins and adapter proteins which mediate cell proliferation. Phosphorylation on Tyr-454 is required for PTPN6 interaction, Tyr-426 for PTPN11. Tyr-426 is also required for SOCS3 binding, but Tyr-454/Tyr-456 motif is the preferred binding site. Ubiquitinated by NOSIP; appears to be either multi-monoubiquitinated or polyubiquitinated. Ubiquitination mediates proliferation and survival of EPO-dependent cells.
Cellular localization	Cell membrane and Secreted. Secreted and located to the cell surface.

Images



SDS-PAGE - Recombinant Human EPO-R protein
(ab211321)

15% SDS-PAGE analysis of ab211321 (3µg). Molecular weight is 28-40kDa on SDS-PAGE under reducing conditions.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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