



Rabbit Anti-phospho-EPO Receptor (Tyr485) antibody

SL13088R

Product Name:	phospho-EPO Receptor (Tyr485)
Chinese Name:	磷酸化红细胞生成素受体抗体
Alias:	EPO Receptor (phospho Y485); p-EPO Receptor (phospho Y485); EPOR (phospho Y485); p-EPOR (phospho Y485); erythropoietin receptor; EPO R; EPO Receptor; Erythropoietin receptor precursor; EPOR_HUMAN; MGC138358.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	55kDa
Cellular localization:	The cell membraneExtracellular matrixSecretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthesised phosphopeptide derived from human EPO Receptor around the phosphorylation site of Tyr485:GP(p-Y)SN
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	The erythropoietin receptor (EPOR) is a member of the cytokine receptor family. There

are several isoforms including: EPOR-F (full length), EPOR-S (soluble form), and EPOR-T (truncated form). Upon erythropoietin (EPO) binding, the EPOR activates Jak2 tyrosine kinase which activates different intracellular pathways including: Ras/MAP kinase, phosphatidylinositol 3-kinase and STAT transcription factors. The stimulated EPOR appears to have a role in erythroid cell survival. Defects in the EPOR may produce erythroleukemia and familial erythrocytosis. A functional EPOR is found in the cardiovascular system, including endothelial cells and cardiomyocytes, and data suggest that the EPO/EPO receptor system plays an important role in cardiac function. In animal studies, treatment with EPO during ischemia/reperfusion in the heart has been shown to limit the infarct size and the extent of apoptosis.

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.

Subcellular Location:

Cell membrane and Secreted. Secreted and located to the cell surface.

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 form in early-stage erythroid progenitor cells.

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.

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.

Similarity:

Belongs to the type I cytokine receptor family. Type 1 subfamily.
Contains 1 fibronectin type-III domain.

SWISS:
P19235

Gene ID:
2057

Database links:

[Entrez Gene: 2057](#)Human

[Entrez Gene: 13857](#)Mouse

[Entrez Gene: 24336](#)Rat

[Omim: 133171](#)Human

[SwissProt: P19235](#)Human

[SwissProt: P14753](#)Mouse

[SwissProt: Q07303](#)Rat

[Unigene: 631624](#)Human

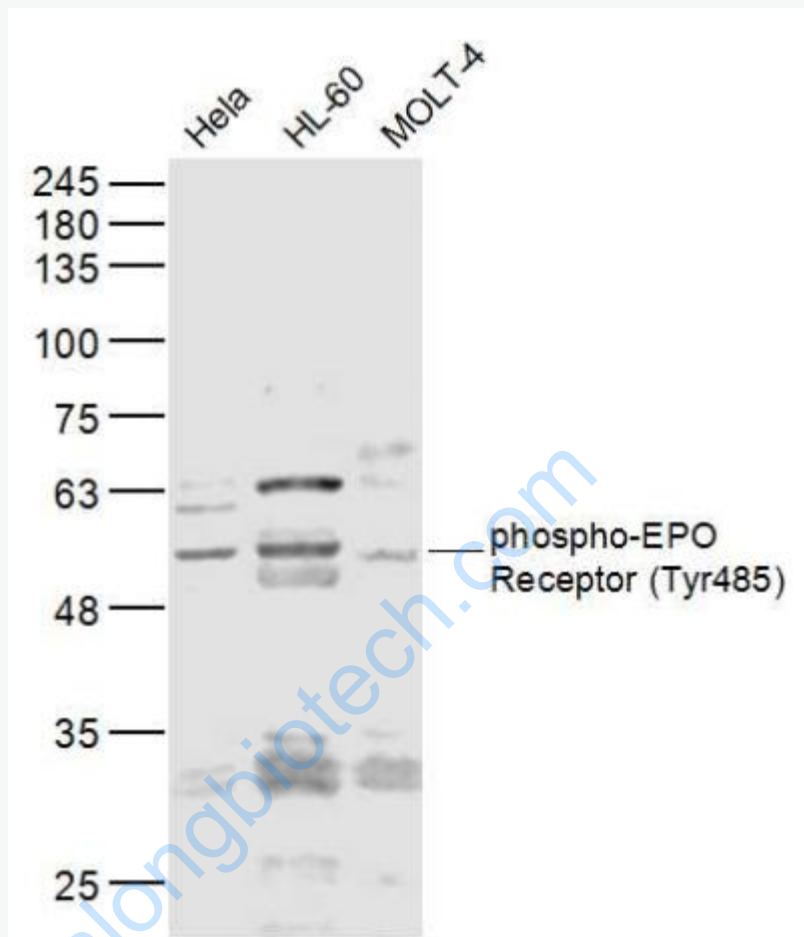
[Unigene: 2653](#)Mouse

[Unigene: 22394](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Picture:



Sample:

HeLa(Human) Cell Lysate at 30 ug

HL-60(Human) Cell Lysate at 30 ug

MOLT-4(Human) Cell Lysate at 30 ug

Primary: Anti- phospho-EPO Receptor (Tyr485) (SL13088R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 55 kD

Observed band size: 55 kD