

## **EpoR** (phospho Tyr368) Polyclonal Antibody

Catalog No: YP0552

**Reactivity:** Human; Mouse; Rat

**Applications:** WB;IF;ELISA

Target: EpoR

Fields: >>Cytokine-cytokine receptor interaction;>>PI3K-Akt signaling pathway;>>JAK-

STAT signaling pathway;>>Hematopoietic cell lineage;>>Pathways in cancer

Gene Name: EPOR

**Protein Name:** Erythropoietin receptor

P19235

P14753

Human Gene Id: 2057

**Human Swiss Prot** 

No:

Mouse Gene Id: 13857

**Mouse Swiss Prot** 

No:

Rat Swiss Prot No: Q07303

**Immunogen:** The antiserum was produced against synthesized peptide derived from human

Epo-R around the phosphorylation site of Tyr368. AA range:341-390

Specificity: Phospho-EpoR (Y368) Polyclonal Antibody detects endogenous levels of EpoR

protein only when phosphorylated at Y368.

**Formulation:** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, lgG

**Dilution:** WB 1:500 - 1:2000. IF 1:200 - 1:1000. ELISA: 1:10000. Not yet tested in other

applications.



**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

**Concentration**: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 55kD

**Cell Pathway :** Cytokine-cytokine receptor interaction; Jak\_STAT; Hematopoietic cell lineage;

**Background :** This gene encodes the erythropoietin receptor which is a member of the cytokine

receptor family. Upon erythropoietin binding, this receptor activates Jak2 tyrosine kinase which activates different intracellular pathways including: Ras/MAP kinase, phosphatidylinositol 3-kinase and STAT transcription factors. The stimulated erythropoietin receptor appears to have a role in erythroid cell survival.

Defects in the erythropoietin receptor may produce erythroleukemia and familial erythrocytosis. Dysregulation of this gene may affect the growth of certain tumors. Alternate splicing results in multiple transcript variants. [provided by RefSeq, May

2010],

**Function:** 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.,domain: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.,domain:The box 1 motif is required for JAK interaction and/or activation.,domain:The WSXWS motif appears to be necessary

for proper protein folding and thereby efficient intracellular tra

Subcellular Location :

Cell membrane; Single-pass type I membrane protein.; [Isoform EPOR-S]:

Secreted . Secreted and located to the cell surface.

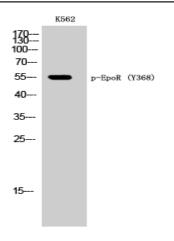
**Expression :** Erythroid cells and erythroid progenitor cells. Isoform EPOR-F is the most

abundant form in EPO-dependent erythroleukemia cells and in late-stage erythroid progenitors. Isoform EPOR-S and isoform EPOR-T are the predominant

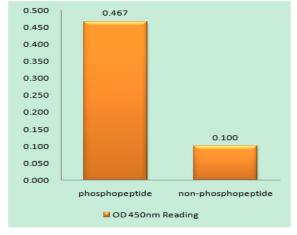
forms in bone marrow. Isoform EPOR-T is the most abundant from in early-stage

erythroid progenitor cells.

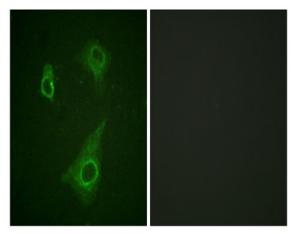
## **Products Images**



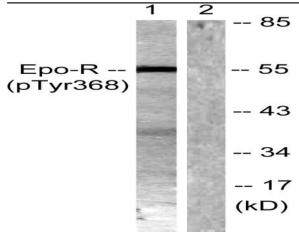
Western Blot analysis of K562 cells using Phospho-EpoR (Y368) Polyclonal Antibody



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using Epo-R (Phospho-Tyr368) Antibody



Immunofluorescence analysis of HepG2 cells, using Epo-R (Phospho-Tyr368) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from K562 cells, using Epo-R (Phospho-Tyr368) Antibody. The lane on the right is blocked with the phospho peptide.