

EPOR Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP16681c

Specification

EPOR Antibody (Center) - Product Information

Application Primary Accession	IF, WB, FC,E P19235
Other Accession	<u>NP_000112.1</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	55065
Antigen Region	329-357

EPOR Antibody (Center) - Additional Information

Gene ID 2057

Other Names Erythropoietin receptor, EPO-R, EPOR

Target/Specificity

This EPOR antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 329-357 amino acids from the Central region of human EPOR.

Dilution IF~~1:10~50 WB~~1:1000 FC~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

EPOR Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

EPOR Antibody (Center) - Protein Information

Name EPOR {ECO:0000303|PubMed:2163695, ECO:0000312|HGNC:HGNC:3416}



Function Receptor for erythropoietin, which mediates erythropoietin- induced erythroblast proliferation and differentiation (PubMed:<u>10388848</u>, PubMed:<u>2163695</u>, PubMed:<u>2163696</u>, PubMed:<u>8662939</u>, PubMed:<u>9774108</u>). Upon EPO stimulation, EPOR dimerizes triggering the JAK2/STAT5 signaling cascade (By similarity). In some cell types, can also activate STAT1 and STAT3 (PubMed:<u>11756159</u>). May also activate the LYN tyrosine kinase (By similarity).

Cellular Location

Cell membrane {ECO:0000250|UniProtKB:P14753}; Single-pass type I membrane protein

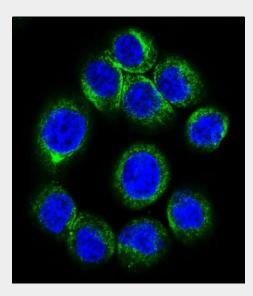
Tissue Location

Erythroid cells and erythroid progenitor cells. [Isoform EPOR-S]: Isoform EPOR-S and isoform EPOR-T are the predominant forms in bone marrow.

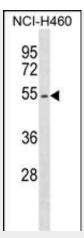
EPOR Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

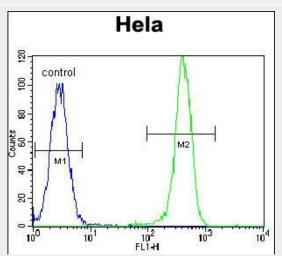
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- **EPOR Antibody (Center) Images**



Confocal immunofluorescent analysis of EPOR Antibody (Center)(Cat#AP16681c) with Hela cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green).DAPI was used to stain the cell nuclear (blue).



EPOR Antibody (Center) (Cat. #AP16681c) western blot analysis in NCI-H460 cell line lysates (35ug/lane).This demonstrates the EPOR antibody detected the EPOR protein (arrow).



EPOR Antibody (Center) (Cat. #AP16681c) flow cytometric analysis of Hela cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

EPOR Antibody (Center) - 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.

EPOR Antibody (Center) - References

Lim, A.C., et al. Biochemistry 49(18):3797-3804(2010) Perrotta, S., et al. PLoS ONE 5 (8), E12015 (2010) : Khankin, E.V., et al. PLoS ONE 5 (2), E9246 (2010) : Wincewicz, A., et al. Folia Histochem. Cytobiol. 47(3):425-430(2009) Ketteler, R., et al. J. Biol. Chem. 278(4):2654-2660(2003)