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EPOR Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16681c

Product Information

Application	WB, IF, FC, E
Primary Accession	P19235
Other Accession	NP_000112.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB30358
Calculated MW	55065
Antigen Region	329-357

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	WB~~1:1000 IF~~1:10~50 FC~~1:10~50 E~~Use at an assay dependent concentration.
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.

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:10388848, PubMed:2163695, PubMed:2163696, PubMed:8662939, PubMed:9774108).

	Upon EPO stimulation, EPOR dimerizes triggering the JAK2/STAT5 signaling cascade (By similarity). In some cell types, can also activate STAT1 and STAT3 (PubMed:11756159). 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.

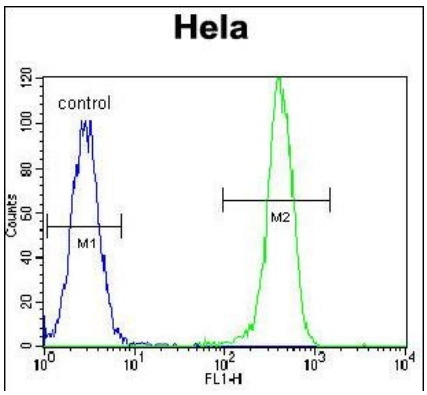
Background

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.

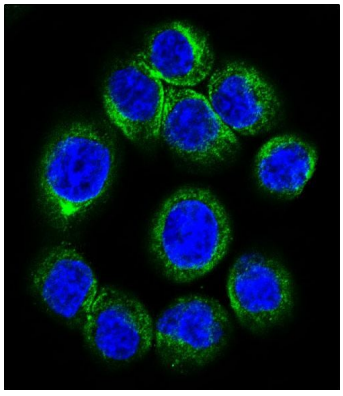
References

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)

Images

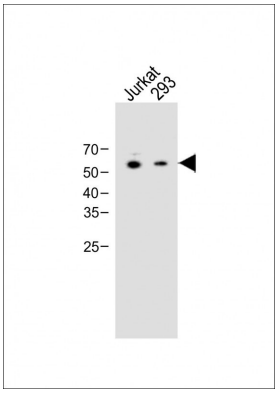


EPOR Antibody (Center) (Cat. #AP16681c) flow cytometric analysis of Hela cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



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

All lanes: Anti-EPOR Antibody (Center) at 1:1000 dilution



Lane 1: Jurkat whole cell lysate Lane 2: 293 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 55 KDa Blocking/Dilution buffer: 5% NFDM/TBST.