

### EPOR Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AW5363

### Specification

# **EPOR Antibody (C-term) - Product Information**

FC, WB,E <u>P19235</u> Human Rabbit Polyclonal H=55 KDa Rabbit IgG
HUMAN

# **EPOR Antibody (C-term) - Additional Information**

Gene ID 2057

Antigen Region 470-504

Other Names Erythropoietin receptor, EPO-R, EPOR

**Dilution** FC~~1:25 WB~~1:2000

Target/Specificity

This EPOR antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 470-504 amino acids from the C-terminal region of human EPOR.

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 (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# **EPOR Antibody (C-term) - 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:<a href="http://www.uniprot.org/citations/10388848" target="\_blank">10388848</a>, PubMed:<a href="http://www.uniprot.org/citations/2163695" target="\_blank">2163695</a>, PubMed:<a href="http://www.uniprot.org/citations/2163696" target="\_blank">2163695</a>, PubMed:<a href="http://www.uniprot.org/citations/2163696" target="\_blank">2163696</a>, PubMed:<a href="http://www.uniprot.org/citations/2163696" target="\_blank">2163696</a>, PubMed:<a href="http://www.uniprot.org/citations/8662939" target="\_blank">8662939</a>, PubMed:<a href="http://www.uniprot.org/citations/9774108" target="\_blank">9774108</a>). Upon EPO stimulation, EPOR dimerizes triggering the JAK2/STAT5 signaling cascade (By similarity). In some cell types, can also activate STAT1 and STAT3 (PubMed:<a href="http://www.uniprot.org/citations/11756159" target="\_blank">11756159</a>). 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

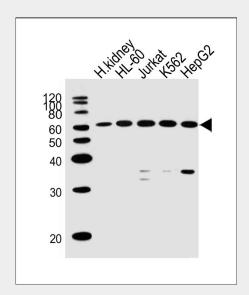
Erythroid cells and erythroid progenitor cells. [Isoform EPOR-S]: Isoform EPOR-S and isoform EPOR-T are the predominant forms in bone marrow.

## EPOR Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

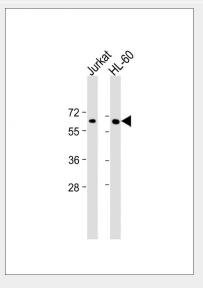
#### EPOR Antibody (C-term) - Images



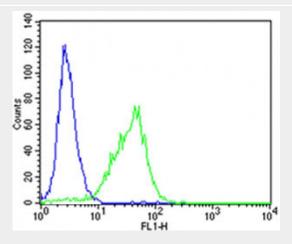
All lanes : Anti-EPOR Antibody (C-term)(AW5363) at 1/1000 dilution Lane 1: human kidney lysates Lane 2: HL-60 whole cell lysates Lane 3: Jurkat whole cell lysates Lane 4: K562 whole cell lysates Lane 5: HepG2 whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit



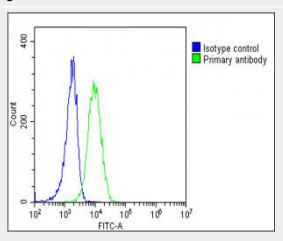
IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 62 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



All lanes : Anti-EPOR Antibody (C-term) at 1:2000 dilution Lane 1: Jurkat whole cell lysate Lane 2: HL-60 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 55 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Flow cytometric analysis of K562 cells using EPOR Antibody (C-term)(green, Cat#AW5363) compared to an isotype control of rabbit IgG(blue). AW5363 was diluted at 1:25 dilution. An Alexa Fluor® 488 goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody.





Overlay histogram showing K562 cells stained with AW5363(green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AW5363, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(OH191631) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG1 (1 $\mu$ g/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

### EPOR Antibody (C-term) - Background

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.

## **EPOR Antibody (C-term) - References**

Winkelmann J.C., et al. Blood 76:24-30(1990). Jones S.S., et al. Blood 76:31-35(1990). Noguchi C.T., et al. Blood 78:2548-2556(1991). Ehrenman K., et al. Exp. Hematol. 19:973-977(1991). Nakamura Y., et al. Science 257:1138-1141(1992).