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Anti-EPO Receptor Picoband Antibody

Catalog # ABO12838

Specification

Anti-EPO Receptor Picoband Antibody - Product Information

Application	**WB, E**
Primary Accession	P19235
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for EPO Receptor detection. Tested with WB, Direct ELISA in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-EPO Receptor Picoband Antibody - Additional Information

Gene ID 2057

Other Names
Erythropoietin receptor, EPO-R, EPOR

Application Details
Western blot, 0.1-0.5 µg/ml
 Direct ELISA, 0.1-0.5 µg/ml

Subcellular Localization
Cell membrane; Single-pass type I membrane protein.

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 from in early- stage erythroid progenitor cells.

Contents
Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg NaN₃.

Immunogen
E. coli-derived human EPO Receptor recombinant protein (Position: E48-E226).

Cross Reactivity
No cross reactivity with other proteins.

Storage	**At -20˚C; for one year. After r˚Constitution, at 4˚C; for one month. It˚Can also be**

aliquotted and stored frozen at -20˚C; for a longer time. Avoid repeated freezing and thawing.

Anti-EPO Receptor Picoband Antibody - 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.

Anti-EPO Receptor Picoband Antibody - 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
- Cell Culture

Anti-EPO Receptor Picoband Antibody - Images

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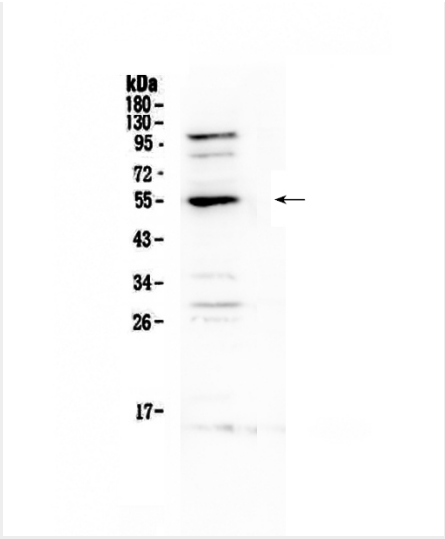

Figure 1. Western blot analysis of EPO Receptor using anti-EPO Receptor antibody (ABO12838).

Anti-EPO Receptor Picoband Antibody - Background

The erythropoietin receptor (EpoR) is a protein that in humans is encoded by the EPOR gene. 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.