

# Anti-EPO Receptor Picoband Antibody

Catalog # ABO12838

## Product Information

---

|                          |                                                                                                             |
|--------------------------|-------------------------------------------------------------------------------------------------------------|
| <b>Application</b>       | WB, E                                                                                                       |
| <b>Primary Accession</b> | <a href="#">P19235</a>                                                                                      |
| <b>Host</b>              | Rabbit                                                                                                      |
| <b>Reactivity</b>        | Human, Mouse, Rat                                                                                           |
| <b>Clonality</b>         | Polyclonal                                                                                                  |
| <b>Format</b>            | Lyophilized                                                                                                 |
| <b>Description</b>       | 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.

## Additional Information

---

|                                 |                                                                                                                                                                                                                                                                                                                                           |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene ID</b>                  | 2057                                                                                                                                                                                                                                                                                                                                      |
| <b>Other Names</b>              | Erythropoietin receptor, EPO-R, EPOR                                                                                                                                                                                                                                                                                                      |
| <b>Calculated MW</b>            | 55065                                                                                                                                                                                                                                                                                                                                     |
| <b>Application Details</b>      | Western blot, 0.1-0.5 µg/ml<br>Direct ELISA, 0.1-0.5 µg/ml                                                                                                                                                                                                                                                                                |
| <b>Subcellular Localization</b> | Cell membrane; Single-pass type I membrane protein.                                                                                                                                                                                                                                                                                       |
| <b>Tissue Specificity</b>       | 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. |
| <b>Source</b>                   | Eukaryota                                                                                                                                                                                                                                                                                                                                 |
| <b>Contents</b>                 | Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na <sub>2</sub> HPO <sub>4</sub> , 0.05mg NaN <sub>3</sub> .                                                                                                                                                                                                                          |
| <b>Immunogen</b>                | E. coli-derived human EPO Receptor recombinant protein (Position: E48-E226).                                                                                                                                                                                                                                                              |
| <b>Cross Reactivity</b>         | No cross reactivity with other proteins.                                                                                                                                                                                                                                                                                                  |
| <b>Storage</b>                  | 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.                                                                                                                                                   |

## Protein Information

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Name</b>              | EPOR {ECO:0000303   PubMed:2163695, ECO:0000312   HGNC:HGNC:3416}                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Function</b>          | Receptor for erythropoietin, which mediates erythropoietin- induced erythroblast proliferation and differentiation (PubMed: <a href="#">10388848</a> , PubMed: <a href="#">2163695</a> , PubMed: <a href="#">2163696</a> , PubMed: <a href="#">8662939</a> , PubMed: <a href="#">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="#">11756159</a> ). May also activate the LYN tyrosine kinase (By similarity). |
| <b>Cellular Location</b> | Cell membrane {ECO:0000250   UniProtKB:P14753}; Single-pass type I membrane protein                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Tissue Location</b>   | Erythroid cells and erythroid progenitor cells. [Isoform EPOR-S]: Isoform EPOR-S and isoform EPOR-T are the predominant forms in bone marrow.                                                                                                                                                                                                                                                                                                                                                                                                           |

## 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.

## Images

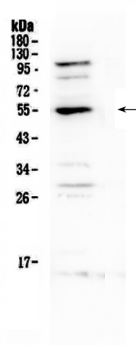


Figure 1. Western blot analysis of EPO Receptor using anti-EPO Receptor antibody (ABO12838).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.