

### EPOR Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant EPOR. Catalog # AT1931a

## **Specification**

### EPOR Antibody (monoclonal) (M01) - Product Information

Application WB, IP, E **Primary Accession** P19235 Other Accession NM 000121 Reactivity Human Host Mouse Clonality **Monoclonal** Isotype IgG2b Kappa Calculated MW 55065

### EPOR Antibody (monoclonal) (M01) - Additional Information

#### **Gene ID 2057**

#### **Other Names**

Erythropoietin receptor, EPO-R, EPOR

## Target/Specificity

EPOR (NP 000112, 31 a.a. ~ 130 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

## **Dilution**

WB~~1:500~1000

IP~~N/A E~~N/A

#### **Format**

Clear, colorless solution in phosphate buffered saline, pH 7.2.

#### Storage

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

# **Precautions**

EPOR Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

# EPOR Antibody (monoclonal) (M01) - Protocols

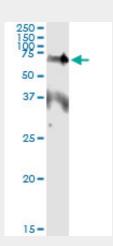
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides

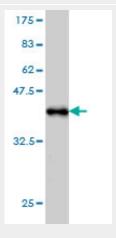


- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# EPOR Antibody (monoclonal) (M01) - Images

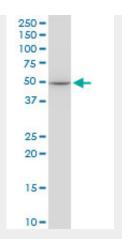


Immunoprecipitation of EPOR transfected lysate using anti-EPOR monoclonal antibody and Protein A Magnetic Bead ( $\underline{\mathsf{U0007}}$ ), and immunoblotted with EPOR MaxPab rabbit polyclonal antibody.

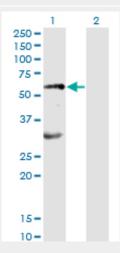


Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.74 KDa) .





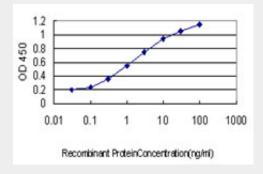
EPOR monoclonal antibody (M01), clone 3D10. Western Blot analysis of EPOR expression in HeLa.



Western Blot analysis of EPOR expression in transfected 293T cell line by EPOR monoclonal antibody (M01), clone 3D10.

Lane 1: EPOR transfected lysate (Predicted MW: 55.1 KDa).

Lane 2: Non-transfected lysate.



Detection limit for recombinant GST tagged EPOR is approximately 0.03ng/ml as a capture antibody.

### EPOR Antibody (monoclonal) (M01) - 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

## EPOR Antibody (monoclonal) (M01) - References

splicing results in multiple transcript variants.

A diversity of antibody epitopes can induce signaling through the erythropoietin receptor. Lim AC, et al. Biochemistry, 2010 May 11. PMID 20337434.STAT3 and hypoxia induced proteins--HIF-1alpha, EPO and EPOR in relation with Bax and Bcl-xL in nodal metastases of ductal breast cancers. Wincewicz A, et al. Folia Histochem Cytobiol, 2009 Jan. PMID 20164027.Absence of functional EpoR expression in human tumor cell lines. Swift S, et al. Blood, 2010 May 27. PMID 20124514.Functional erythropoietin receptor is undetectable in endothelial, cardiac, neuronal, and renal cells. Sinclair AM, et al. Blood, 2010 May 27. PMID 20124513.Induction of nitric oxide by erythropoietin is mediated by the {beta} common receptor and requires interaction with VEGF receptor 2. Sautina L, et al. Blood, 2010 Jan 28. PMID 19965681.

## EPOR Antibody (monoclonal) (M01) - Citations

• Methylation of the first exon in the erythropoietin receptor gene does not correlate with its mRNA and protein level in cancer cells.