

ARG45353 anti-EPO receptor antibody [6G7]

Package: 50 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [6G7] recognizes EPO receptor
Tested Reactivity	Hu
Tested Application	IHC-P
Host	Mouse
Clonality	Monoclonal
Clone	6G7
Isotype	IgG2
Target Name	EPO receptor
Species	Human
Immunogen	Recombinant Human EPO receptor.
Conjugation	Un-conjugated
Alternate Names	Erythropoietin receptor; EPO-R

Application Instructions

Application table	Application	Dilution
	IHC-P	1:50 - 1:300

Application Note * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

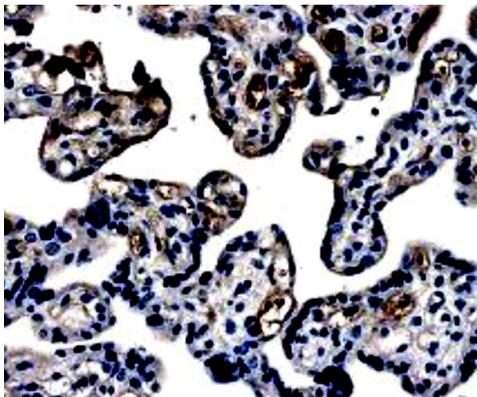
Properties

Form	Powder
Purification	Protein G chromatography
Buffer	PBS
Reconstitution	PBS
Concentration	0.2 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	EPOR
Gene Full Name	erythropoietin receptor
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.[provided by RefSeq, May 2010]
Function	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. Isoform EPOR-T acts as a dominant-negative receptor of EPOR-mediated signaling. [UniProt]
Research Area	Cell Biology and Cellular Response antibody; Cell Death antibody; Developmental Biology antibody; Immune System antibody; Signaling Transduction antibody
Calculated Mw	55 kDa
PTM	On EPO stimulation, phosphorylated on C-terminal tyrosine residues by JAK2. The phosphotyrosine motifs are also recruitment sites for several SH2-containing proteins and adapter proteins which mediate cell proliferation. Phosphorylation on Tyr-454 is required for PTPN6 interaction, Tyr-426 for PTPN11. Tyr-426 is also required for SOCS3 binding, but Tyr-454/Tyr-456 motif is the preferred binding site. Ubiquitination at Lys-281 mediates receptor internalization, whereas ubiquitination at Lys-453 promotes trafficking of activated receptors to the lysosomes for degradation (By similarity). Ubiquitinated by NOSIP; appears to be either multi-monoubiquitinated or polyubiquitinated. Ubiquitination mediates proliferation and survival of EPO-dependent cells. [UniProt]
Cellular Localization	Cell membrane; Single-pass type I membrane protein. [UniProt]

Images



ARG45353 anti-EPO receptor antibody [6G7] IHC-P image

Immunohistochemistry: Human placental stained with ARG45353 anti-EPO receptor antibody [6G7].