



Polyclonal Anti-human EPO^{HuXp} Antibody

Specifications

Species	Rabbit
Source	Human cell
Pack Size	100 µg
IsoType	Total IgG
Storage	-20°C

Product Description

Rabbit polyclonal anti-human EPO antibody was raised against recombinant human EPO expressed in human cell (rhEPO^{HuXp}). HumanZyme's human cell expression system has the advantage of tag-free expression and purification, correct folding, accurate tertiary and quaternary structure and authentic post-translational modifications such as glycosylation, phosphorylation, palmitoylation and disulfide bonds. These post-translational modifications are absent in non-human cell expression system and have important implications for cytokine stability, receptor interaction and in vivo efficacy. Total IgG was purified using Protein A affinity chromatography.

Formulation

Lyophilized from 0.2µm filtered solution in PBS+0.02% sodium azide.

Reconstitution

When reconstituted to 1mg/mL, will be 0.007% sodium azide.

Limited Use and Restrictions

Unless otherwise stated in our catalog or other company documentation accompanying the product, products sold by HumanZyme Inc. are intended for research use only and are not to be used for any other purpose, which includes but is not limited to, unauthorized commercial uses, including resale or use in manufacture, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses or any type of consumption or application to humans or animals. For a complete statement of this Limited Use License and its application to drug discovery and diagnostic research please visit www.humanzyme.com

Certificate of Analysis

Polyclonal Anti-human EPO^{HuXp}

Antibody

Cat #: HZ-5002

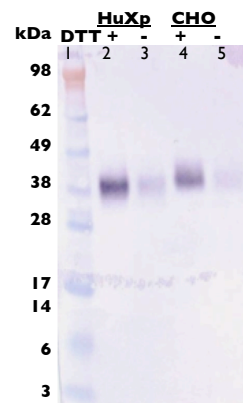
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Background

Human erythropoietin (EPO) is an acidic glycoprotein. It is mainly produced by the kidney. As the primary regulator of the production of red cells, its major functions are to promote erythroid progenitor cells differentiation and to start the synthesis of hemoglobin. EPO acts by binding to a specific erythropoietin receptor (EPOR) on target cells; the red cell precursors in the bone marrow, and induces their transformation into mature erythrocytes. The EPO sensitivity increases with differentiation of immature progenitor cells. EPO may act as a neuron protector against glutamate toxicity. Its neuroprotective activity comes into effect by neutralizing the toxicity of free radicals. EPO is produced in brain after oxidative stress. EPO is upregulated by hypoxia and prevents apoptosis of erythroid progenitors in bone marrow. EPO has also angiogenic properties.

Applications

Western Blot - This antibody can be used at 0.05 to 0.1µg/mL with the appropriate secondary reagents to detect human EPO. The detection limit for rhEPO is approximately 5 ng/lane under reducing and 50 ng/lane under non-reducing conditions.



The Western Blot shows 100ng of EPO from two different expression systems: HuXpTM (lane 2,3), E.coli (lane 4,5). Antibody concentration is 0.1µg/mL.