



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!  
See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 



# Human Erythropoietin, EPO ELISA Kit

Product Code	CSB-E04538h
Abbreviation	EPO
Protein Biological Process 1	Immunity
Uniprot No.	P01588
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Sample Types	serum, plasma, tissue homogenates
Detection Range	0.78 mIU/ml-50 mIU/ml
Sensitivity	0.195 mIU/ml
Assay Time	1-5h
Sample Volume	50-100ul
Detection Wavelength	450 nm
Lead Time	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
Research Area	Immunology
Target Names	EPO
Tag Info	quantitative
Protein Length	Sandwich

## Description

The human Erythropoietin (EPO) ELISA kit (CSB-E04538h) is designed for the quantitative measurement of human EPO protein in serum, plasma, or tissue homogenates. It quantitates human EPO with 1.95 mIU/ml sensitivity and shows excellent specificity for human EPO. It uses the bi-antibody sandwich enzyme immunoassay technique. This assay employs a biotin-conjugated EPO antibody that recognizes the analyte bound by the immobilized EPO antibody, forming an antibody-analyte-antibody complex. The immune complex is further detected by avidin-conjugated HRP. The TMB solution is added into the wells and turns blue and finally turns yellow after the addition of the stop solution. Solution color develops in proportion to the amount of EPO in the sample. The O.D. value is measured using a microplate reader at 450 nm and is used to determine the concentration of the human EPO in the sample.

EPO is generated in the kidney in mammals and plays an essential role in bone marrow erythropoiesis. EPO is a major regulator of erythropoiesis by promoting the survival, proliferation, and differentiation of erythroid progenitor cells and modulating the number of erythrocytes in peripheral blood. Signaling pathways downstream of EPO/EPOR have been shown to influence numerous cellular



functions in both normal and tumor cells, including proliferation, apoptosis, and drug resistance. EPO binds to its receptor EPOR, initiating signaling including PI3K and JAK-STAT pathways that promote growth, repress apoptosis, and induce the differentiation of erythroid progenitors to elevate red blood cell mass. Signaling pathways downstream of EPO-EPOR axis have been shown to affect multiple cellular functions in both normal and cancer cells, including proliferation, apoptosis, and drug resistance.