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EPO

Catalog # PVGS1185

Product Information

Primary Accession	P01588
Species	Human
Sequence	Ala28-Arg193
Purity	> 95% as analyzed by SDS-PAGE > 95% as analyzed by HPLC
Endotoxin Level	
Expression System	CHO
Theoretical Molecular Weight	21 kDa
Formulation	Lyophilized after extensive dialysis against PBS.
Reconstitution	It is recommended that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute the lyophilized powder in ddH_2O or PBS up to 100 □g/ml.
Storage & Stability	Upon receiving, this product remains stable for up to 6 months at lower than -70°C. Upon reconstitution, the product should be stable for up to 1 week at 4°C or up to 3 months at -20°C. For long term storage it is recommended that a carrier protein (example 0.1% BSA) be added. Avoid repeated freeze-thaw cycles.

Additional Information

Gene ID	2056
Other Names	Erythropoietin, Epoetin, EPO
Target Background	Erythropoietin (EPO), a glycoprotein produced primarily by the kidney, is the principal factor that regulates erythropoiesis by stimulating the proliferation and differentiation of erythroid progenitor cells. The production of EPO by kidney cells is increased in response to hypoxia or anemia. Recombinant EPO has been approved for the treatment of anemia associated with chronic renal failure as well as for anemia of AZT treated AIDS patients.The cDNAs for EPO have been cloned from human, mouse, canine, etc. The mature proteins from the various species are highly conserved, exhibiting greater than 80% sequence identity at the amino acid level. Human EPO cDNA encodes a 193 amino acid residue precursor protein that is processed to yield a 165 amino acid residue mature protein. EPO contains one O-linked and three N-linked glycosylation sites. Glycosylation of EPO is required for EPO biological activities in vivo. EPO exhibits structural as well as amino sequence identity to the amino terminal 153 amino acid region of thrombopoietin.

Protein Information

Name	EPO
Function	Hormone involved in the regulation of erythrocyte proliferation and differentiation and the maintenance of a physiological level of circulating erythrocyte mass (PubMed:28283061). Binds to EPOR leading to EPOR dimerization and JAK2 activation thereby activating specific downstream effectors, including STAT1 and STAT3 (PubMed:9774108).
Cellular Location	Secreted.
Tissue Location	Produced by kidney or liver of adult mammals and by liver of fetal or neonatal mammals.

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