

## Product datasheet for **AR51963PU-N**

### Erythropoietin / EPO (28-193, His-tag) Human Protein

#### Product data:

<b>Product Type:</b>	Recombinant Proteins
<b>Description:</b>	Erythropoietin / EPO (28-193, His-tag) human protein, 0.25 mg
<b>Species:</b>	Human
<b>Expression Host:</b>	Insect
<b>Expression cDNA Clone or AA Sequence:</b>	APPRLICDSR VLERYLLEAK EAENITTGCA EHCSLNENIT VPDTKVNFYA WKRMVEVGQQA VEVWQGLALL SEAVLRGQAL LVNSSQPWEP LQLHVVDKAVS GLRSLTLLR ALRAQKEAIS PPDAASAAPL RTITADTFRK LFRVYSNFLR GKLKLYTGEA CRTGDRLEHH HHHH
<b>Tag:</b>	His-tag
<b>Predicted MW:</b>	19.5 kDa
<b>Concentration:</b>	lot specific
<b>Purity:</b>	>95% by SDS - PAGE
<b>Buffer:</b>	Presentation State: Purified State: Liquid purified protein Buffer System: Phosphate Buffered Saline (pH 7.4) containing 10% glycerol.
<b>Bioactivity:</b>	Specific: Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED50 for this effect is equal or less than 0.5 ng/ml.
<b>Endotoxin:</b>	< 1.0 EU per 1 microgram of protein (determined by LAL method)
<b>Preparation:</b>	Liquid purified protein
<b>Storage:</b>	Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer. Avoid repeated freezing and thawing.
<b>Stability:</b>	Shelf life: one year from despatch.
<b>RefSeq:</b>	<a href="#">NP_000790</a>
<b>Locus ID:</b>	2056
<b>UniProt ID:</b>	<a href="#">P01588</a>
<b>Cytogenetics:</b>	7q22.1
<b>Synonyms:</b>	Epoetin



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**Summary:**

This gene encodes a secreted, glycosylated cytokine composed of four alpha helical bundles. The encoded protein is mainly synthesized in the kidney, secreted into the blood plasma, and binds to the erythropoietin receptor to promote red blood cell production, or erythropoiesis, in the bone marrow. Expression of this gene is upregulated under hypoxic conditions, in turn leading to increased erythropoiesis and enhanced oxygen-carrying capacity of the blood. Expression of this gene has also been observed in brain and in the eye, and elevated expression levels have been observed in diabetic retinopathy and ocular hypertension. Recombinant forms of the encoded protein exhibit neuroprotective activity against a variety of potential brain injuries, as well as antiapoptotic functions in several tissue types, and have been used in the treatment of anemia and to enhance the efficacy of cancer therapies. [provided by RefSeq, Aug 2017]

**Protein Families:**

Druggable Genome, ES Cell Differentiation/IPS, Secreted Protein, Transmembrane

**Protein Pathways:**

Cytokine-cytokine receptor interaction, Hematopoietic cell lineage, Jak-STAT signaling pathway

**Product images:**