

## Product datasheet for **AR31186PU-N**

### Erythropoietin / EPO Human Protein

#### Product data:

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| <b>Product Type:</b>                         | Recombinant Proteins   |
| <b>Description:</b>                          | Erythropoietin / EPO human recombinant protein, 50 µg  |
| <b>Species:</b>                              | Human  |
| <b>Expression Host:</b>                      | CHO  |
| <b>Expression cDNA Clone or AA Sequence:</b> | APPRLICDSR VLERYLLEAK EAENITTGCA EHCSLNENIT VPDTKVNFYA WKRMEVGQQA VEVWQGLALL SEAVLRGQAL LVNSSQPWEP LQLHVVDKAVS GLRSLTLLR ALGAQKEAIS PPDAASAAPL RTITADTRFRK LFRVYSNFLR GKLKLYTGEA CRTGDR  |
| <b>Predicted MW:</b>                         | 37.0 kDa   |
| <b>Purity:</b>                               | >90% pure by SDS-PAGE gel and HPLC analyses  |
| <b>Buffer:</b>                               | Presentation State: Purified<br>State: Lyophilized (0.2µ Sterile filtered) purified protein  |
| <b>Bioactivity:</b>                          | Biological: Determined by a cell proliferation assay using TF-1 cells. The expected ED <sub>50</sub> for this effect is 0.8-1.0 ng/ml.   |
| <b>Reconstitution Method:</b>                | Restore in water to a concentration of 0.1-1.0 mg/ml.<br>Do not vortex. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.   |
| <b>Preparation:</b>                          | Lyophilized (0.2µ Sterile filtered) purified protein   |
| <b>Protein Description:</b>                  | Human EPO <i>Cat.-No</i> AR31186PU contains 166 amino acid residues and has a calculated molecular weight of approximately 18.4 kDa. As a result of glycosylation, Recombinant Human EPO migrates with an apparent molecular mass of 37.0 kDa by SDS-PAGE gel, under reducing and non-reducing conditions. |
| <b>Storage:</b>                              | Store lyophilized at 2-8°C for 6 months or at -20°C long term.<br>After reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C long term.<br>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   |



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**UniProt ID:** [P01588](#)

**Cytogenetics:** 7q22.1

**Synonyms:** Epoetin

**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