

## Product datasheet for **AR05112PU-N**

### Erythropoietin / EPO (alpha) Human Protein

#### Product data:

Product Type:	Recombinant Proteins
Description:	Erythropoietin / EPO (alpha) human recombinant protein, 50 µg
Species:	Human
Concentration:	0.2 mg/ml (after reconstitution)
Purity:	>98% pure by HPLC analysis and SDS-PAGE
Buffer:	State: Lyophilized purified protein Buffer System: Citrate buffered saline
Bioactivity:	Biological: The specific activity was measured by normocythaemic mice and found to have an activity of 120,000 IU/mg.
Reconstitution Method:	Restore in 250 µl sterile deionised water. Care should be taken during reconstitution as the protein may appear as a film at the bottom of the vial. We recommend that the vial is gently mixed after reconstitution. For long term storage the addition of a carrier protein (0.1% HSA or BSA) is recommended.
Preparation:	Lyophilized purified protein
Applications:	<b>Functional Assays.</b>
Protein Description:	This antigen is Recombinant Human Erythropoietin alpha, produced in CHO cells. It is a single polypeptide chain containing 166 amino acids with a predicted molecular mass of 21,000 Daltons and an apparent molecular mass of 30,400 Daltons.
Storage:	Prior to reconstitution store at 2-8°C. After reconstitution store at -20°C. This product should be stored undiluted. Should this product contain a precipitate we recommend microcentrifugation before use. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
RefSeq:	<a href="#">NP_000790</a>
Locus ID:	2056
UniProt ID:	<a href="#">P01588</a>
Cytogenetics:	7q22.1



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**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:** **Functional Assays.**

**Protein Pathways:** Cytokine-cytokine receptor interaction, Hematopoietic cell lineage, Jak-STAT signaling pathway