

## Erythropoietin Active Protein | EPO active protein

Erythropoietin, 28-193aa, Human, His tag, Baculovirus (Bioactivity Validated)

CATALOG #  
**AAA48918**

APPLICATIONS  
**SDS-Page**

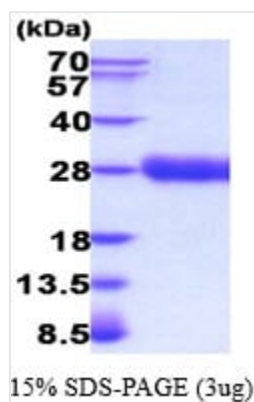
### PRODUCT SYNONYMS

Erythropoietin; 28-193aa; Human; His tag; Baculovirus (Bioactivity Validated); EPO; EP; MVCD2; EPO active protein

### PRODUCT SPECIFICATIONS

|                                                |                                                                                                                                                                                                        |
|------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Purity/Purification                            | > 95% by SDS-PAGE                                                                                                                                                                                      |
| Form/Format                                    | Liquid. In phosphate buffered saline (pH 7.4) containing 10% glycerol.                                                                                                                                 |
| Concentration                                  | 0.5 mg/ml (determined by Absorbance at 280nm) (varies by lot)                                                                                                                                          |
| Sequence                                       | APPRLICDSR VLERYLLEAK EAENITTGCA EHC SLNENIT VPDTKVN FYA WKRMEVGQQA VEVWQGLALL<br>SEAVLRGQAL LVNSSQPWEP LQLHVDKAVS GLRSLTTLR ALRAQKEAIS PPDAASAAPL RTITADTFRK<br>LFRVYSNFLR GKLLYTG EA CRTGDRLEHH HHHH |
| Sequence Length                                | 193                                                                                                                                                                                                    |
| Applicable Applications for EPO active protein | SDS-PAGE                                                                                                                                                                                               |
| Tag Information                                | His-tag                                                                                                                                                                                                |
| Predicted N terminal                           | Ala28                                                                                                                                                                                                  |
| Endotoxin Level                                | < 1.0 EU per 1 microgram of protein (determined by LAL method)                                                                                                                                         |
| Biological Activity                            | Measured in a cell proliferation assay using TF-1 human erythroleukemic cells. The ED50 for this effect is equal or less than 0.5ng/ml.                                                                |
| Preparation and Storage                        | Can be stored at 4°C short term (1-2 weeks).<br>For long term storage, aliquot and store at -20°C or -70°C.<br>Avoid repeated freezing and thawing cycles.                                             |

### IMAGES



SDS-PAGE

ADDITIONAL INFORMATION

|                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for EPO active protein | EPO, also known as erythropoietin, is a glycoprotein hormone in the type I cytokine family and is related to thrombopoietin. Its three N-glycosylation sites, four alpha helices, and N- to C-terminal disulfide bond are conserved across species. It is primarily produced in the kidney by a population of fibroblast-like cortical interstitial cells adjacent to the proximal tubules. This protein can be found in the plasma and regulates red cell production by promoting erythroid differentiation and initiating hemoglobin synthesis. It also has neuroprotective activity against a variety of potential brain injuries and anti-apoptotic functions in several tissue types. Recombinant human EPO, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques. |
| Product Categories/Family for EPO active protein   | Cardiovascular; Angiogenesis                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| References                                         | Koury, M.J., et al. (2005) Exp. Hematol. 33:1263.; Jelkmann W., et al. (2007) Eur J Haematol. 78:183-205                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

NCBI AND UNIPROT INFORMATION

|                                  |                                                                |
|----------------------------------|----------------------------------------------------------------|
| NCBI GI #                        | 62240997                                                       |
| NCBI GeneID                      | 2056                                                           |
| NCBI Accession #                 | NP_000790                                                      |
| NCBI GenBank Nucleotide #        | NM_000799.3                                                    |
| UniProt Accession #              | P01588; Q2M2L6; Q549U2; Q9UDZ0; Q9UEZ5; Q9UHA0                 |
| Molecular Weight                 | 19.5kDa (174aa) 28-40KDa (SDS-PAGE under reducing conditions.) |
| NCBI Official Full Name          | erythropoietin                                                 |
| NCBI Official Synonym Full Names | erythropoietin                                                 |
| NCBI Official Symbol             | EPO                                                            |
| NCBI Official Synonym Symbols    | EP; MVCD2                                                      |
| NCBI Protein Information         | erythropoietin                                                 |
| UniProt Protein Name             | Erythropoietin                                                 |
| UniProt Gene Name                | EPO                                                            |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.