


CA1048	<b>HumanKine™ EPO</b>			
	<b>Prod. No. S2306-10UG</b> <i>For Research Use Only</i> <i>Not intended for use in humans or animals</i>	<b>lot #: PR1XXXXXX XXXX</b>	Orders & Support Web	866 372-7442 support@primorigen.com www.primorigen.com

<b>Pack Size</b>	10 µg
<b>Species</b>	Human
<b>Expression System</b>	HEK 293*
	Animal-derived product free
<b>Molecular Mass</b>	36 kDa, monomer, glycosylated
<b>Activity</b>	Typically 0.5 to 2.5 ng/mL
<b>Purity</b>	≥ 95%
<b>Endotoxin</b>	≤ 1 EU/µg

**Background:** Recombinant human erythropoietin expressed in engineered human cells. EPO is a 36 kDa monomeric glycoprotein and belongs to the EPO/TPO protein family. EPO is an acidic hormone mainly produced by kidneys. EPO promotes erythroid progenitor cell differentiation and initiates hemoglobin synthesis. EPO acts by binding to a specific erythropoietin receptor (EPOR) present on the red blood cell precursor in the bone marrow, stimulating these cells to transform into mature erythrocytes. The EPO sensitivity progressively increases with differentiation of immature progenitor cells.

*Note: Representative data are shown below (not Lot-specific).*

### Formulation:

Lyophilized from a 0.2 micron filtered solution in PBS

### Reconstitution:

Briefly centrifuge the vial before opening. It is recommended to reconstitute the protein in sterile PBS containing 0.1% endotoxin-free recombinant human serum albumin.

### Storage and Stability:

Lyophilized products are stable for one year at -20°C to -80°C from date of receipt. Store only at -20°C to -80°C in working aliquots. Avoid repeated freeze-thaw cycles.

### Quality Control Testing

#### Assay:

The specific activity was determined by the dose-dependent stimulation of the proliferation of human TF-1 cells (human erythroleukemic indicator cell line).

#### Purity Confirmation:

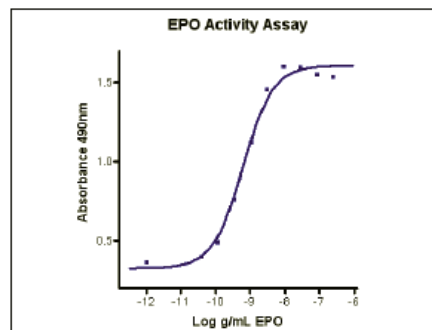
The protein was resolved by SDS-polyacrylamide gel electrophoresis and the gel was stained with Coomassie blue.

#### References:

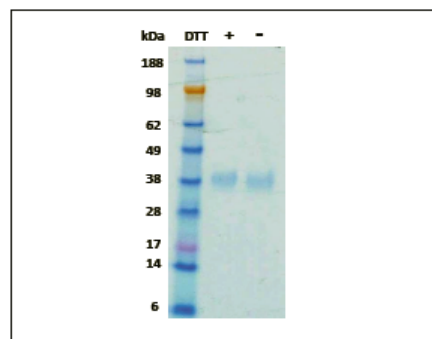
Kitamura, T., *et al* (1989) *J. Cell Physiol.* 140, 323-334  
Sinclair, A. M., *et al* (2007) *Cancer* 110, 477-488

\*All HumanKine™ cytokines are expressed in HEK 293 cells. HumanKine™ is a trademark of HumanZyme Inc.

## A. Activity Assay



## B. SDS-PAGE



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