

## Erythropoietin/EPO Protein, Mouse (HEK293)

Cat. No.:	HY-P73038A
Synonyms:	
Species:	Mouse
Source:	HEK293
Accession:	NP_031968.1 (A27-R192)
Gene ID:	13856
Molecular Weight:	Approximately 23-36 kDa due to glycosylation.

### PROPERTIES

AA Sequence	<pre> A P P R L I C D S R   V L E R Y I L E A K   E A E N V T M G C A   E G P R L S E N I T V P D T K V N F Y A   W K R M E V E E Q A   I E V W Q G L S L L   S E A I L Q A Q A L L A N S S Q P P E T   L Q L H I D K A I S   G L R S L T S L L R   V L G A Q K E L M S P P D T T P P A P L   R T L T V D T F C K   L F R V Y A N F L R   G K L K L Y T G E V C R R G D R           </pre>
Biological Activity	Measured in a cell proliferation assay using TF $\beta$ 1 human erythroleukemic cells. The ED <sub>50</sub> for this effect is 0.2134 ng/mL, corresponding to a specific activity is 4.68×10 <sup>6</sup> units/mg.
Appearance	Lyophilized powder
Formulation	Lyophilized from a 0.2 $\mu$ m filtered solution of 20 mM PB, 150 mM NaCl, pH 7.4.
Endotoxin Level	<1 EU/ $\mu$ g, determined by LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 $\mu$ g/mL in ddH <sub>2</sub> O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

### DESCRIPTION

Background	This gene encodes the glycoprotein hormone erythropoietin, which plays a crucial role in regulating red blood cell production and hemoglobin biosynthesis. While this gene is predominantly expressed in the liver during fetal development, it shifts to the kidneys in adults. Complete absence of the encoded protein leads to embryonic lethal anemia in mice, and conditional inactivation in adult mice results in chronic, normocytic, and normochromic anemia. Transgenic mice
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expressing the human ortholog of this gene exhibit polycythemia. Various isoforms are generated through alternative splicing. Notably, the expression of this gene is low in the reference dataset.

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**Caution: Product has not been fully validated for medical applications. For research use only.**

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