

## Product datasheet for RC210775L4V

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## **EPO (NM\_000799) Human Tagged ORF Clone Lentiviral Particle**

**Product data:** 

**Product Type:** Lentiviral Particles

**Product Name:** EPO (NM\_000799) Human Tagged ORF Clone Lentiviral Particle

Symbol: EPO

Synonyms: DBAL; ECYT5; EP; MVCD2

Mammalian Cell

Selection:

Puromycin

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

Tag: mGFP

**ACCN:** NM\_000799

ORF Size: 579 bp

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(RC210775).

Sequence:

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

**RefSeg:** NM 000799.2

 RefSeq Size:
 1340 bp

 RefSeq ORF:
 582 bp

 Locus ID:
 2056

 UniProt ID:
 P01588

 Cytogenetics:
 7q22.1

**Protein Families:** Druggable Genome, ES Cell Differentiation/IPS, Secreted Protein, Transmembrane





## EPO (NM\_000799) Human Tagged ORF Clone Lentiviral Particle - RC210775L4V

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

pathway

**MW:** 21.31 kDa

**Gene 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]