

EPO mRNA encodes the human erythropoietin (EPO) protein, a hormone that controls erythropoiesis, or red blood cell production. EPO also plays a role in wound healing and the brain's response to neural injury. Karikó et al. showed that transfection of EPO mRNA *in vivo* resulted in significant increases of both reticulocyte counts and hematocrits.

This mRNA is capped using CleanCap™, TriLink's proprietary co-transcriptional capping method, which results in the naturally occurring Cap 1 structure with high capping efficiency. It is polyadenylated, modified with 5-methoxyuridine and optimized for mammalian systems. It mimics a fully processed mature mRNA.

L-7209-20 (20 µgrams)  
L-7209-100 (100 µgrams)  
L-7209-1000 (1 mg)  
L-7209-BK (Bulk amount)

1.0 mg/mL in 1mM Sodium Citrate (pH 6.4)  
mRNA Length: 858 nucleotides

Store at or below -40°C

### QC Analysis

Identity and Purity  
Agarose Gel Mobility; Pass  
Concentration: ± 6%; Pass

Product released by Quality Assurance

<sup>1</sup>A standard conversion factor of 40 µg/OD<sub>260</sub> was used to calculate quantity.

## Handling

Store at or below -40°C. Thaw and work with mRNA on ice. Upon first use, pulse spin before opening and aliquot into single use portions. Do not vortex. Use only certified RNase-free reagents and consumables with proper RNase-free technique. Use of barrier tips is recommended. Avoid freeze/thaw cycles. Do not mix with media containing serum unless first complexed with a stabilizing transfection reagent.

## References

Karikó K, Muramatsu H, Keller JM, Weissman D. Increased erythropoiesis in mice injected with submicrogram quantities of pseudouridine-containing mRNA encoding erythropoietin. *Mol Ther.* 2012 May;20(5):948-53.

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The Modified Nucleic Acid **Experts™**