

**Guinea Pig Expression Clone IFN- $\gamma$ , Recombinant in *Escherichia coli***

**Catalog No. NR-36036**

**Product Description:** NR-36036 is an expression clone containing the mature peptide region of interferon-gamma, IFN- $\gamma$ , (GenBank: NM\_001172874) from *Cavia porcellus* (guinea pig). The IFN- $\gamma$  gene was cloned into vector pQE-30 via *Bam*HI and *Hind*III insertion sites and transformed into *Escherichia coli* (*E. coli*), strain M15, competent cells. The M15 strain of *E. coli* contains a low-copy plasmid, pREP4, which confers kanamycin resistance and constitutively expresses the lac repressor, which is utilized for tight regulation of recombinant protein expression in this strain. The pQE-30 vector contains a T5 promoter, a  $\beta$ -lactamase gene for ampicillin resistance, an N-terminal His-tag for purification, a thrombin cleavage site between the His-tag and the protein, and the *lacI* gene which is used for enhanced protein expression via IPTG induction.

**Lot<sup>1</sup>: 61161555**

**Manufacturing Date: 02AUG2012**

TEST	SPECIFICATIONS	RESULTS
<b>Purity (post-freeze)<sup>2</sup></b>	Report results	Single colony type consistent with <i>E. coli</i>
<b>Plasmid Analysis</b> Sequencing of insert (~ 440 base pairs)	≥ 99% identical to GenBank: NM_001172874 ( <i>Cavia porcellus</i> , IFN- $\gamma$ gene)	≥ 99% identical to GenBank: NM_001172874 ( <i>Cavia porcellus</i> , IFN- $\gamma$ gene)
<b>Confirmation of pREP4<sup>3</sup></b>	Growth	Growth
<b>Viability (post-freeze)<sup>2</sup></b>	Growth	Growth

<sup>1</sup>24 hours at 37°C and aerobic atmosphere in Luria Bertani (LB) broth containing 100 µg/mL ampicillin with shaking

<sup>2</sup>24 hours at 37°C and aerobic atmosphere on LB agar containing 100 µg/mL ampicillin

<sup>3</sup>24 hours at 37°C and aerobic atmosphere on LB agar containing 50 µg/mL kanamycin

**Date:** 17 OCT 2012

**Signature:** 

**Title:** Technical Manager, BEI Authentication or designee

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