

## Product datasheet for **RG209993**

### Interferon gamma (IFNG) (NM\_000619) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Interferon gamma (IFNG) (NM\_000619) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Interferon gamma  
**Synonyms:** IFG; IFI; IMD69  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG209993 representing NM\_000619  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGAAATATAACAAGTTATATCTTGGCTTTTCAGCTCTGCATCGTTTTGGTTCTCTTGGCTGTTACTGCC  
 AGGACCCATATGTAAGAAGCAGAAAACCTTAAGAAATATTTAATGCAGGTCATTGAGATGTAGCGGA  
 TAATGGAAGCTTTTCTTAGGCATTTTGAAGAATTGGAAAGAGGAGGTGACAGAAAAAATGCAGAGC  
 CAAATTGTCTCCTTTTACTTCAAACCTTTTAAAACTTTAAAGATGACCAGAGCATCCAAAAGAGTGTGG  
 AGACCATCAAGGAAGACATGAATGTCAAGTTTTCAATAGCAACAAAAAGAAACGAGATGACTTCGAAAA  
 GCTGACTAATTATTCGGTAACTGACTTGAATGTCCAACGCAAAGCAATACATGAACCTCATCAAGTGATG  
 GCTGAACTGTCGCCAGCAGCTAAAACAGGGAAGCGAAAAAGGAGTCAGATGCTGTTTCGAGGTCGAAGAG  
 CATCCAG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG209993 representing NM\_000619  
 Red=Cloning site Green=Tags(s)  
 MKYTSYILAFQLCIVLGSGLGCYQDPYVKEAENLKKYFNAGHSDVADNGTLFLGILKNWKEESDRKIMQS  
 QIVSFYFKLFKNFKDDQSIQKSVETIKEDMNVKFFNSNKKKRDDFEKLTNYSVTDLNVQRKAIHELIVQM  
 AELSPAAKTGKRKRSQMLFRGRRASQ

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** SgfI-MluI



**Cloning Scheme:**


**ACCN:** NM\_000619

**ORF Size:** 498 bp

**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.

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
  2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
  3. Close the tube and incubate for 10 minutes at room temperature.
  4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
  5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

**RefSeq:** [NM\\_000619.3](#)

**RefSeq Size:** 1240 bp

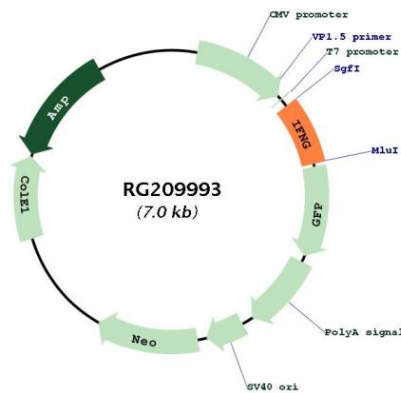
**RefSeq ORF:** 501 bp

**Locus ID:** 3458

**UniProt ID:** [P01579](#)

<b>Cytogenetics:</b>	12q15
<b>Protein Families:</b>	Druggable Genome, Secreted Protein
<b>Protein Pathways:</b>	Allograft rejection, Cytokine-cytokine receptor interaction, Graft-versus-host disease, Jak-STAT signaling pathway, Natural killer cell mediated cytotoxicity, Proteasome, Regulation of autophagy, Systemic lupus erythematosus, T cell receptor signaling pathway, TGF-beta signaling pathway, Type I diabetes mellitus
<b>Gene Summary:</b>	This gene encodes a soluble cytokine that is a member of the type II interferon class. The encoded protein is secreted by cells of both the innate and adaptive immune systems. The active protein is a homodimer that binds to the interferon gamma receptor which triggers a cellular response to viral and microbial infections. Mutations in this gene are associated with an increased susceptibility to viral, bacterial and parasitic infections and to several autoimmune diseases. [provided by RefSeq, Dec 2015]

**Product images:**



Circular map for RG209993