

## Product datasheet for **MG226748**

### **II4 (NM\_021283) Mouse Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** II4 (NM\_021283) Mouse Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** II4  
**Synonyms:** BSF-1; II-4  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >MG226748 representing NM\_021283  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGGTCTCAACCCAGCTAGTTGTCATCCTGCTCTTCTTTCTCGAATGTACCAGGAGCCATATCCAGG  
 GATGCGACAAAAATCACTTGAGAGAGATCATCGGCATTTTGAACGAGGTACAGGAGAAGGGACGCCATG  
 CACGGAGATGGATGTGCCAACGTCCTCACAGCAACGAAGAACCACAGAGAGTGAGCTCGTCTGTAGG  
 GCTTCCAAGGTGCTTCGCATATTTATTTAAAACATGGGAAAACCCATGCTTGAAGAAGAACTCTAGTG  
 TTCTCATGGAGCTGCAGAGACTTTTCGGGCTTTTCGATGCCTGGATTCATCGATAAGCTGCACCATGAA  
 TGAGTCCAAGTCCACATCACTGAAAGACTTCTGGAAAGCCTAAAGAGCATCATGCAAATGGACTACTCG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG226748 representing NM\_021283  
 Red=Cloning site Green=Tags(s)

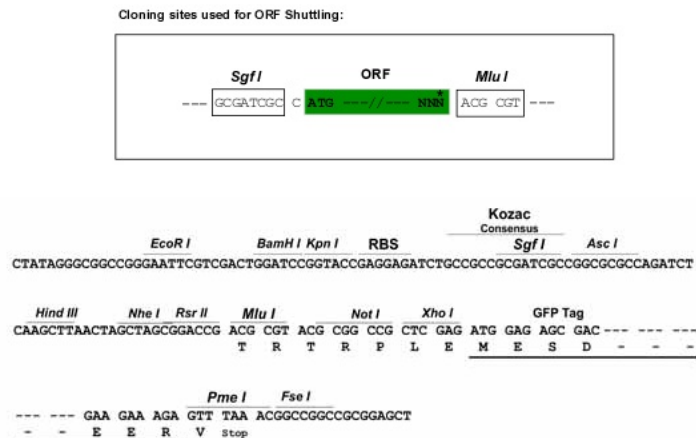
MGLNPQLVVILLFFLECTRSHIHGCDKNHLREIIGILNEVTGEGTPCTEMDVPNVLTATKNTTESELVCR  
 ASKVLRIFYLKHGKTPCLKKNSSVLMELQRLFRAFRCCLDSSISCTMNESKSTSLKDFLESLSKIMQMDYS

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** Sgfl-MluI



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**Cloning Scheme:**


**ACCN:** NM\_021283

**ORF Size:** 420 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\\_021283.2](#), [NP\\_067258.1](#)

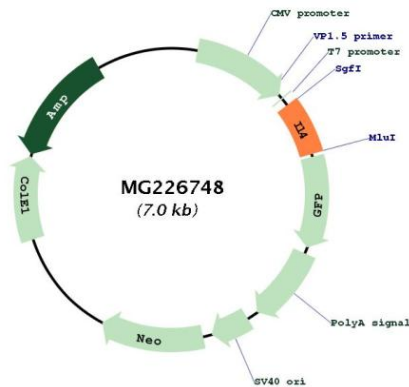
**RefSeq Size:** 605 bp

**RefSeq ORF:** 423 bp

**Locus ID:** 16189  
**UniProt ID:** [P07750](#)  
**Cytogenetics:** 11 31.97 cM

**Gene Summary:** Participates in at least several B-cell activation processes as well as of other cell types (PubMed:3083412). It is a costimulator of DNA-synthesis. It induces the expression of class II MHC molecules on resting B-cells (PubMed:3498301). It enhances both secretion and cell surface expression of IgE and IgG1 (PubMed:3498301). It also regulates the expression of the low affinity Fc receptor for IgE (CD23) on both lymphocytes and monocytes. Positively regulates IL31RA expression in macrophages (PubMed:25847241). Stimulates autophagy in dendritic cells by interfering with mTORC1 signaling and through the induction of RUFY4 (PubMed:26416964).[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MG226748