

## Product datasheet for MR228227

### II21 (NM\_001291041) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** II21 (NM\_001291041) Mouse Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** II21  
**Synonyms:** IL-21  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**ORF Nucleotide Sequence:** >MR228227 representing NM\_001291041  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGGAGAGGACCCTTGTCTGTCTGGTAGTCATCTTCTTGGGGACAGTGGCCATAAATCAAGCCCCAAG  
GGCCAGATCGCCTCCTGATTAGACTTCGTCACCTTATTGACATTGTTGAACAGCTGAAAACTATGAAA  
TGACTTGGATCCTGAACCTCTATCAGCTCCACAAGATGTAAGGGGCACTGTGAGCATGCAGCTTTTGCC  
TGTTTTCAGAAGGCCAACTCAAGCCATCAAACCTGGAAACAATAAGACATTCATCATTGACCTCGTGG  
CCCAGCTCAGGAGGAGGCTGCCAGGAGGGGAGGAAAGAAACAGAAGCACATAGCTAAATGCCCTTC  
CTGTGATTCGATGAGAAAAGGACACCCAAAGAATTCCTAGAAAGACTAAAATGGCTCCTTCAAAGGTA  
TGCACCTAAATGCATTTCTTCACTTCCATGTTGTGTCGGGTACCTCCTGTGCCAGTGACTCA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >MR228227 representing NM\_001291041  
Red=Cloning site Green=Tags(s)

MERTLVCLVVFILGTVAHKSSPQGPDRLLIRLRHLIDIVEQLKIYENDLPELLSAPQDVKGHCEHAFA  
CFQKAKLKPSNPGNNTFIIDLVAQLRRRLPARRGGKKQKHIKCPSCDSYEKRTPEFLERLKLWLLQKV  
CTLNAFLSLPCCVRVPPVPSDS

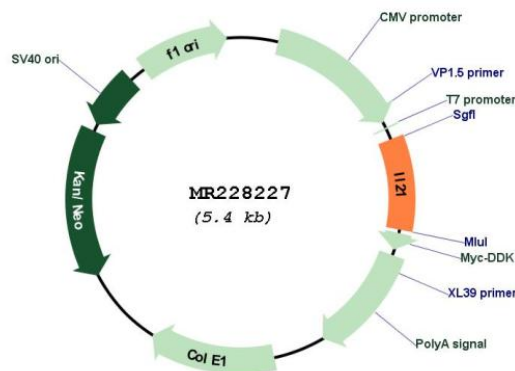
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI



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**Cloning Scheme:**

**Plasmid Map:**


**ACCN:** NM\_001291041

**ORF Size:** 486 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.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u>NM_001291041.1, NP_001277970.1</u>
<b>RefSeq Size:</b>	3178 bp
<b>RefSeq ORF:</b>	489 bp
<b>Locus ID:</b>	60505
<b>Cytogenetics:</b>	3 B
<b>MW:</b>	18.8 kDa
<b>Gene Summary:</b>	Cytokine with immunoregulatory activity. May promote the transition between innate and adaptive immunity. Induces the production of IgG(1) and IgG(3) in B-cells. May play a role in proliferation and maturation of natural killer (NK) cells in synergy with IL15. May regulate proliferation of mature B- and T-cells in response to activating stimuli. In synergy with IL15 and IL18 stimulates interferon gamma production in T-cells and NK cells (By similarity). During T-cell mediated immune response may inhibit dendritic cells (DC) activation and maturation.[UniProtKB/Swiss-Prot Function]