

## Product datasheet for **MG209941**

### **Foxp1 (BC064764) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Foxp1 (BC064764) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Foxp1
Synonyms:	3110052D19Rik; 4932443N09Rik; AI461938; AW494214
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG209941 representing BC064764  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

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**ACGCGT**ACGCGGGCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:** >MG209941 representing BC064764  
 Red=Cloning site Green=Tags(s)

```
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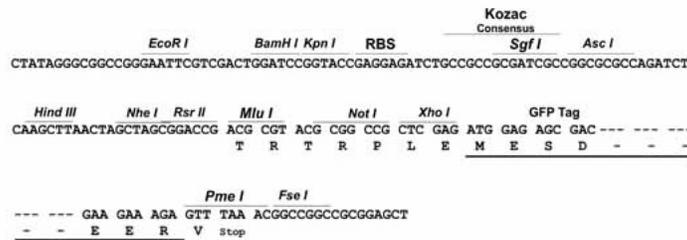
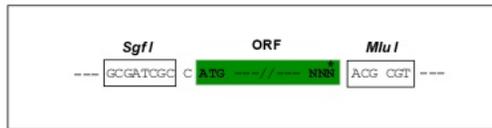
TRTRPLE - GFP Tag - V

**Restriction Sites:**

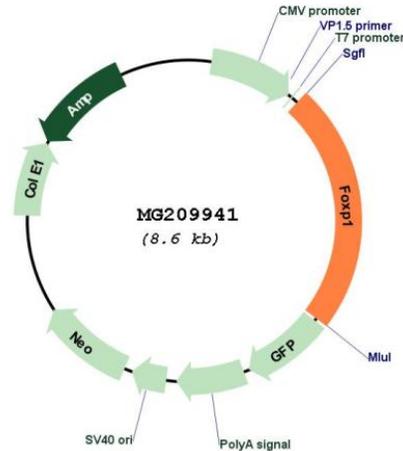
Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



## Plasmid Map:



ACCN: BC064764

ORF Size: 2021 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: [BC064764](#), [AAH64764](#)

RefSeq Size: 2348 bp

RefSeq ORF: 2021 bp

Locus ID: 108655

Cytogenetics: 6 D3

**Gene Summary:** Transcriptional repressor. Can act with CTBP1 to synergistically repress transcription but CTPBP1 is not essential (PubMed:11358962, PubMed:14701752). Plays an important role in the specification and differentiation of lung epithelium. Acts cooperatively with FOXP4 to regulate lung secretory epithelial cell fate and regeneration by restricting the goblet cell lineage program; the function may involve regulation of AGR2 (PubMed:11358962, PubMed:22675208). Essential transcriptional regulator of B-cell development (PubMed:16819554). Involved in regulation of cardiac muscle cell proliferation (PubMed:20713518). Involved in the columnar organization of spinal motor neurons. Promotes the formation of the lateral motor neuron column (LMC) and the preganglionic motor column (PGC) and is required for respective appropriate motor axon projections. The segment-appropriate generation of spinal chord motor columns requires cooperation with other Hox proteins (PubMed:18667151, PubMed:18662545). Can regulate PITX3 promoter activity; may promote midbrain identity in embryonic stem cell-derived dopamine neurons by regulating PITX3 (PubMed:20175877). Negatively regulates the differentiation of T follicular helper cells T(FH)s (PubMed:24859450). Involved in maintenance of hair follicle stem cell quiescence; the function probably involves regulation of FGF18 (PubMed:23946441). Represses transcription of various pro-apoptotic genes and cooperates with NF-kappa B-signaling in promoting B-cell expansion by inhibition of caspase-dependent apoptosis. Binds to CSF1R promoter elements and is involved in regulation of monocyte differentiation and macrophage functions; repression of CSF1R in monocytes seems to involve NCOR2 as corepressor. Involved in endothelial cell proliferation, tube formation and migration indicative for a role in angiogenesis; the role in neovascularization seems to implicate suppression of SEMA5B. Can negatively regulate androgen receptor signaling (By similarity). [UniProtKB/Swiss-Prot Function]