

## Product datasheet for **RC230464**

### FOXP2 (NM\_148900) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	FOXP2 (NM_148900) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	FOXP2
Synonyms:	CAGH44; SPCH1; TNRC10
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**ORF Nucleotide Sequence:**

>RC230464 representing NM\_148900  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGATGCAGGAATCTGCGACAGAGACAATAAGCAACAGTTCAATGAATCAAAATGGAATGAGCACTCTAA  
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 GCCATACGAAGGCGACATTCAGACAAATAACAATTCCCATGTCATCAGAAATTGCCCAAACCTATGAAT  
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 AAGAGCCTTTATCTGAAGATCTGGAA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC230464 representing NM\_148900  
 Red=Cloning site Green=Tags(s)

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MMQESATETISNSSMNQNGMSTLSSQLDAGSRDGRSSGDTSSSEVSTVELLHLQQQQALQAARQLLQQQT
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GKQAKEQQQQQQQQQLAAQQLVFQQQLLQMQQLQQQQHLLSLQRQLISIPPGQAALPVQSLPQAGLSP
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AIRRRHSDKYNIPMSSEIAPNYEFYKNADVRRPFYATLIRQAIMESSDRQLTLNEIYSWFTRTFAYFRR
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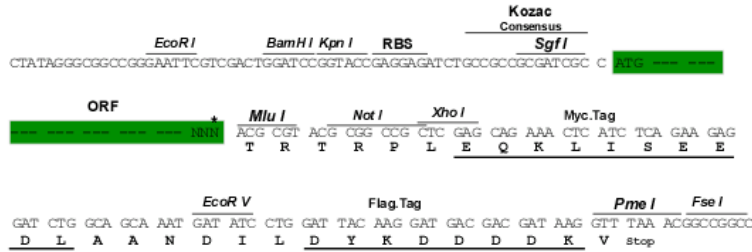
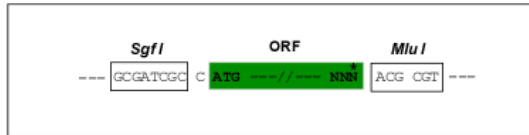
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

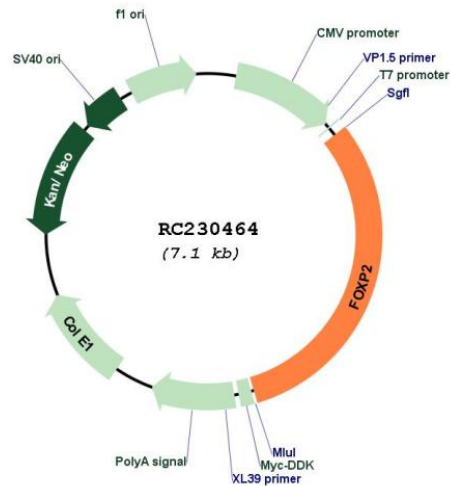
Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**Plasmid Map:**


**ACCN:** NM\_148900

**ORF Size:** 2196 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\\_148900.3](#), [NP\\_683698.2](#)

**RefSeq Size:** 6424 bp

**RefSeq ORF:** 2199 bp

**Locus ID:** 93986

UniProt ID: [O15409](#)

Cytogenetics: 7q31.1

Protein Families: Transcription Factors

MW: 81.8 kDa

**Gene Summary:** This gene encodes a member of the forkhead/winged-helix (FOX) family of transcription factors. It is expressed in fetal and adult brain as well as in several other organs such as the lung and gut. The protein product contains a FOX DNA-binding domain and a large polyglutamine tract and is an evolutionarily conserved transcription factor, which may bind directly to approximately 300 to 400 gene promoters in the human genome to regulate the expression of a variety of genes. This gene is required for proper development of speech and language regions of the brain during embryogenesis, and may be involved in a variety of biological pathways and cascades that may ultimately influence language development. Mutations in this gene cause speech-language disorder 1 (SPCH1), also known as autosomal dominant speech and language disorder with orofacial dyspraxia. Multiple alternative transcripts encoding different isoforms have been identified in this gene.[provided by RefSeq, Feb 2010]