

## Product datasheet for **RG215021**

### **FOXP2 (NM\_014491) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	FOXP2 (NM_014491) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	FOXP2
Synonyms:	CAGH44; SPCH1; TNRC10
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide  
Sequence:

>RG215021 representing NM\_014491  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGATGCAGGAATCTGCGACAGAGACAATAAGCAACAGTTCAATGAATCAAAATGGAATGAGCACTCTAA  
GCAGCCAATTAGATGCTGGCAGCAGAGATGGAAGATCAAGTGGTACACCAGCTCTGAAGTAAGCACAGT  
AGAACTGCTGCATCTGCAACAACAGCAGGCTCTCCAGGCAGCAAGACAACCTCTTTTACAGCAGCAAACA  
AGTGGATTGAAATCTCCTAAGAGCAGTGATAAACAGAGACCAGTGCAGGTGCCTGTGTGAGTGGCCATGA  
TGACTCCCAGGTGATCACCCCTCAGCAAATGCAGCAGATCCTTCAGCAACAAGTCTGTCTCTCAGCA  
GCTACAAGCCCTTCTCAACAACAGCAGGCTGTCATGCTGCAGCAGCAACAACAAGAGTTTTACAAG  
AAACAGCAAGAGCAGTTACATCTTCAGCTTTTGCAGCAGCAGCAGCAACAGCAGCAGCAGCAACAACAGC  
AGCAACAACAGCAGCAGCAACAACAACAACAGCAGCAACAACAGCAGCAGCAGCAGCAACAGCAGCA  
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GCAGCCCAGCAGCTTGTCTTCCAGCAGCAGCTTCTCCAGATGCAACAACCTCCAGCAGCAGCAGCATCTGC  
TCAGCCTTCAGCGTCAGGACTCATCTCCATTCCACCTGGCCAGGCAGCACTTCTGTCCAAATCGTGCC  
TCAAGCTGGCTTAAGTCCTGCTGAGATTCAGCAGTTATGGAAAGAAGTACTGGAGTTACAGTATGGAA  
GACAATGGCATTAAACATGGAGGGCTAGACCTCACTACTAACAATTCCTCCTCGACTACCTCCTCAACA  
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ACGAGACAGCTCGTCACATGAGGAGACTGGGGCTCTCACACTCTATGGCCATGGAGTTTGCAATGG  
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ATTGCCCAAACATGAATTTTAAAAATGCAGATGTCAGACCTCCATTTACTTATGCAACTCTCATAA  
GGCAGGCTATCATGGAGTCTGACAGGCAGTTAACACTTAATGAAATTTACAGCTGGTTTACACGGAC  
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GGTCACAAAAGATAACAGGAAGTCCAACCTTAGTAAAAAATATACCTACCAGTTTAGGCTATGGAGCAGC  
TCTTAATGCCAGTTTGCAGGCTGCCTTGGCAGAGAGCAGTTTACCTTTGCTAAGTAATCCTGGACTGATA  
AATAATGCATCCAGTGGCTACTGCAGGCCGCTCCACGAAGACCTCAATGGTTCTCTGGATCATTGACA  
GCAATGGAAACAGTAGTCCGGGCTGCTCACCTCAGCCGCACATACATTCAATCCACGTCAAGGAAGAGCC  
AGTGATTGCAGAGGATGAAGACTGCCAATGTCCTTAGTGACAACAGCTAATCACAGTCCAGAATTAGAA  
GACGACAGAGAGATTGAAGAAGAGCCTTTATCTGAAGATCTGGAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG215021 representing NM\_014491  
 Red=Cloning site Green=Tags(s)

```
MMQESATETISNSSMNQNGMSTLSSQLDAGSRDRSSGDTSSSEVSTVELLHLQQQQALQAARQLLQQQT
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AAQQLVFQQQLLQMQLQQQQHLLSLQRQGLISIPPGQAALPVQSLPQAGLSPAETQQLWKEVTGVHSME
DNGIKHGGLDLTTNNSSTSSNTSKASPPITHHSIVNGQSSVLSARRDSSSHEETGASHTLYGHGVCKW
PGCESICEDFGQFLKHLNNEHALDDRSTAQCRVQMVVQLEIQLSKERERLQAMMTHLMRPSEPKPSP
KPLNLVSSVTMSKNMLETSPQSLPQTPTPTAPVTPITQGPSVITPASVNVGAIRRRHSDKYNIPMSSE
IAPNYEFYKNADVRRPFTYATLIRQAIMESSDRQLTLNEIYSWFTRTFAYFRNAATWKNVVRHNLSLHK
CFVRVENVKGAVWTVDEVEYQKRRSQKITGSPTLVKNIPTSLGYGAALNASLQAALAESSPLLSNPGLI
NNASSGLLQAVHEDLNGSLDHIDSNGNSSPGCSPQPHIHSIHVKEEPVIAEDEDPCMSLVTTANHSPELE
DDREIEEEPLESLE
```

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_014491

**ORF Size:** 2145 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\\_014491.4](#)

**RefSeq Size:** 2472 bp

**RefSeq ORF:** 2148 bp

**Locus ID:** 93986

**UniProt ID:** [O15409](#)

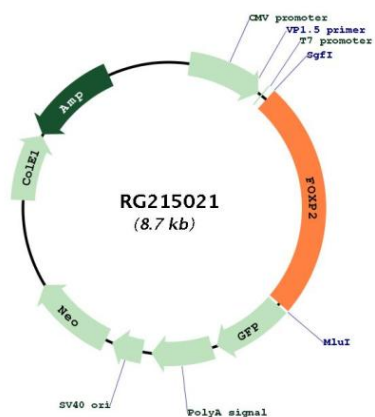
**Cytogenetics:** 7q31.1

**Domains:** FH

**Protein Families:** Transcription Factors

**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]

Product images:



Circular map for RG215021