

Product datasheet for **RG233688**

OTX2 (NM_001270525) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: OTX2 (NM_001270525) Human Tagged ORF Clone
Tag: TurboGFP
Symbol: OTX2
Synonyms: CPHD6; MCOPS5
Mammalian Cell Selection: Neomycin
Vector: pCMV6-AC-GFP (PS100010)
E. coli Selection: Ampicillin (100 ug/mL)
ORF Nucleotide Sequence: >RG233688 representing NM_001270525
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGATGTCTTATCTTAAGCAACCGCCTTACGCAGTCAATGGGCTGAGTCTGACCACTTCGGGTATGGACT
 TGCTGCACCCCTCCGTGGGCTACCCGGGGCCCTGGGCTTCTTGTCCCGCAGCCACCCCCGGAAACAGCG
 CCGGGAGAGGACGACGTTCACTCGGGCGCAGCTAGATGTGCTGGAAGCACTGTTTGCCAAGACCCGGTAC
 CCAGACATCTTCATGCGAGAGGAGGTGGCACTGAAAATCAACTTGCCCGAGTCGAGGGTGCAGGTATGGT
 TTAAGAATCGAAGAGCTAAGTCCGCCAACACAGCAACAACAGCAGAATGGAGGTCAAAACAAAGTGAG
 ACCTGCCAAAAAGAAGACATCTCCAGCTCGGGAAGTGAGTTCAGAGAGTGAACAAGTGGCCAATCACT
 CCCCCCTCTAGCACCTCAGTCCCGACCATTGCCAGCAGCAGTGCTCCTGTGTCTATCTGGAGCCCAGCTT
 CCATCTCCCCACTGTGAGATCCCTTGTCCACCTCCTCTTCTGATGCAGAGGTCTATCCCATGACCTA
 TACTCAGGCTTCAGGTTATAGTCAAGGATATGCTGGCTCAACTTCCTACTTTGGGGGCATGGACTGTGGA
 TCATATTTGACCCCTATGCATCACCAGCTTCCCGACCAGGGGCCACACTCAGTCCCATGGGTACCAATG
 CAGTCACCAGCCATCTCAATCAGTCCCCAGCTTCTTTCCACCCAGGGATATGGAGCTTCAAGCTTGGG
 TTTAACTCAACCACTGATTGCTTGGATTATAAGGACCAAACCTGCCTCCTGGAAGCTTAACTTCAATGCT
 GACTGCTTGGATTATAAAGATCAGACATCCTCGTGGAAATTCAGGTTTTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG233688 representing NM_001270525
Red=Cloning site Green=Tags(s)

MMSYLKQPPYAVNGLSLTTSGMDLLHPSVGYGPWASCPAATPRKQRRERTTFTRAQLDVLEALFAKTRY
 PDIFMREEVALKINLPESRVQVWFKNRRAKCRQQQQQQNGGQNKVRPAKKTSPAREVSSSESGTSGQFT
 PPSSTSVPTIASSAPVSIWSPASISPLSDPLSTSSSCMQRSYPMTYTQASGYSQGYAGSTSYFGGMDCG
 SYLTPMHHQLPGPGATLSPMGTNAVTSHLNQSPASLSTQGYGASSLGFNSTTDCLDYKDQTASWKLNFNA
 DCLDYKDQTSWKFKVL

TRTRPLE - GFP Tag - V

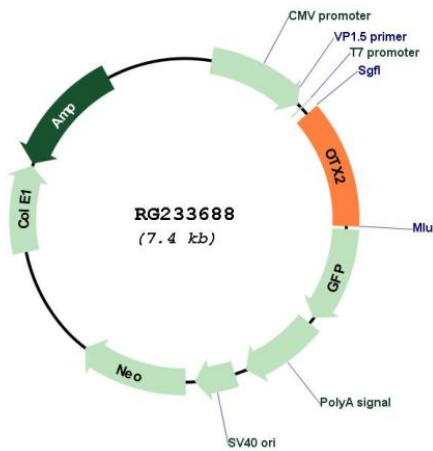
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_001270525

ORF Size: 891 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:	<ol style="list-style-type: none">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_001270525.2
RefSeq Size:	2142 bp
RefSeq ORF:	894 bp
Locus ID:	5015
UniProt ID:	P32243
Cytogenetics:	14q22.3
Protein Families:	Embryonic stem cells, Induced pluripotent stem cells, Stem cell - Pluripotency, Transcription Factors
Gene Summary:	<p>This gene encodes a member of the bicoid subfamily of homeodomain-containing transcription factors. The encoded protein acts as a transcription factor and plays a role in brain, craniofacial, and sensory organ development. The encoded protein also influences the proliferation and differentiation of dopaminergic neuronal progenitor cells during mitosis. Mutations in this gene cause syndromic microphthalmia 5 (MCOPS5) and combined pituitary hormone deficiency 6 (CPHD6). This gene is also suspected of having an oncogenic role in medulloblastoma. Alternative splicing results in multiple transcript variants encoding distinct isoforms. Pseudogenes of this gene are known to exist on chromosomes two and nine. [provided by RefSeq, Jul 2012]</p>