

## Product datasheet for SC306753

### OTX2 (NM\_172337) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	OTX2 (NM_172337) Human Untagged Clone
Tag:	Tag Free
Symbol:	OTX2
Synonyms:	CPHD6; MCOP55
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC306753 representing NM_172337. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTT TAGTGAACCGTCAGAATTTTGT AATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCC GCGATCGCC
ATGATGTCTTATCTTAAGCAACCGCCTTACGCAGTCAATGGGCTGAGTCTGACCCTTCGGGTATGGAC
TTGCTGCACCCCTCCGTGGGCTACCCGGCCACCCCGGAAACAGCGCCGGGAGAGGACGACGTTCACT
CGGGCGCAGTAGATGTCTGGAAGCACTGTTTGCCAAGACCCGGTACCCAGACATCTTCATGCGAGAG
GAGGTGGCACTGAAAATCAACTTGCCCGAGTCGAGGGTGCAGGTATGGTTAAGAATCGAAGAGCTAAG
TGCCGCAACAACAGCAACAACAGCAGAATGGAGGTCAAACAAGTGAGACCTGCCAAAAGAAGACA
TCTCCAGCTCGGGAAGTGAGTTCAGAGAGTGGAACAAGTGCCAATTCCTCCCCCTCTAGCACCTCA
GTCCCGACCATTCAGCAGCAGTGTCTCTGTCTATCTGGAGCCAGCTTCCATCTCCCACTGTCA
GATCCCTTGCCACCTCCTCTTCTGCATGCAGAGGTCCTATCCCATGACCTATACTCAGGCTTCAGGT
TATAGTCAAGGATATGCTGGCTCAACTTCTACTTTGGGGCATGGACTGTGGATCATATTTGACCCCT
ATGCATCACCAGCTTCCCGGACCAGGGCCACACTCAGTCCCATGGGTACCAATGCAGTACCAGCCAT
CTCAATCAGTCCCAGCTTCTCTTCCACCCAGGGATATGGAGCTTCAAGCTTGGGTTTTAACTCAAC
ACTGATTGCTTGATTATAAGGACCAACTGCCTCCTGGAAGCTTAACTCAATGCTGACTGCTTGGAT
TATAAAGATCAGACATCCTCGTGAAATTCAGGTTTTG TGA
ACGCGTACGCGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGCGC
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Restriction Sites:	Sgfl-MluI
Plasmid Map:	<input type="checkbox"/>
ACCN:	NM_172337
Insert Size:	870 bp



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<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<b>OTI Annotation:</b>	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
<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>	<a href="#">NM_172337.2</a>
<b>RefSeq Size:</b>	2118 bp
<b>RefSeq ORF:</b>	870 bp
<b>Locus ID:</b>	5015
<b>UniProt ID:</b>	<a href="#">P32243</a>
<b>Cytogenetics:</b>	14q22.3
<b>Protein Families:</b>	Embryonic stem cells, Induced pluripotent stem cells, Stem cell - Pluripotency, Transcription Factors
<b>MW:</b>	31.6 kDa
<b>Gene Summary:</b>	<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> <p>Transcript Variant: This variant (2) differs in the 5' UTR and lacks an in-frame segment of the coding region, compared to variant 1, and, compared to isoform a, encodes a shorter isoform (b). Variants 2-4 encode the same protein (isoform b).</p>