

## Product datasheet for **MC207342**

### Otx2 (NM\_144841) Mouse Untagged Clone

#### Product data:

|                           |   |
|---------------------------|---|
| Product Type:             | Expression Plasmids   |
| Product Name:             | Otx2 (NM_144841) Mouse Untagged Clone                         |
| Tag:                      | Tag Free  |
| Symbol:                   | Otx2  |
| Synonyms:                 | E130306E05Rik   |
| Mammalian Cell Selection: | Neomycin  |
| Vector:                   | pCMV6-Entry (PS100001)  |
| E. coli Selection:        | Kanamycin (25 ug/mL)  |
| Fully Sequenced ORF:      | >MC207342 representing NM_144841<br>Red=Cloning site Blue=ORF |

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGATGTCTTATCTAAAGCAACCGCCTTACGCAGTCAATGGGCTGAGTCTGACCACTTCGGGTATGGACT  
TGCTGCATCCCTCCGTGGGCTACCCGCCACCCCGGAAACAGCGAAGGGAGAGGACGACATTTACTAG  
GGCACAGCTCGACGTTCTGGAAGCTCTGTTTGCCAAGACCCGGTACCCAGACATCTTCATGAGGGAAGAG  
GTGGCACTGAAAATCAACTTGCCAGAATCCAGGGTGCAGGTATGGTTTAAAGATCGAAGAGCTAAGTGCC  
GCCAACAGCAGCAGCAGCAGCAGAATGGAGGTGAGAACAAGTGAGGCCCTGCCAAGAAGAAGAGCTCTCC  
AGCTCGGGAAGTGAGTTCAGAGAGTGGAACAAGTGCCAGTTCAGTCCCCCTCTAGTACCTCAGTCCCA  
ACCATTGCCAGCAGCAGTGTCCAGTGTCTATCTGGAGCCAGCGTCCATCTCCCCACTGTCTGACCCCT  
TGTCCACTTCTCCTCCTGCATGCAGAGGTCTATCCCATGACCTATACTCAGGCTTCAGGTTATAGTCA  
AGGCTATGCTGGCTCAACTTCTACTTTGGGGCATGGACTGTGGATCTTATTTGACCCCTATGCATCAC  
CAGTTCCTGGACCAGGGGCCACACTCAGTCCCATGGGTACCAATGCTGTTACCAGCCATCTCAATCAGT  
CCCCAGTTCCTTTCCACCCAGGGATATGGAGCTTCAAGCTTGGGTTTAACTCAACCAGTATTGCTT  
GGATTATAAGGACCAAACTGCCTCTTGGAACTTAACTCAATGCTGACTGCTTGGATTATAAGATCAG  
ACGTCTCATGGAAATTCAGGTTTTGTGA

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

|                    |           |
|--------------------|-----------|
| Restriction Sites: | Sgfl-MluI |
| ACCN:              | NM_144841 |
| Insert Size:       | 870 bp    |



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**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at [custsupport@origene.com](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

**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:** [BC017609](#), [AAH17609](#)

**RefSeq Size:** 1737 bp

**RefSeq ORF:** 870 bp

**Locus ID:** 18424

**Cytogenetics:** 14 25.36 cM

**Gene Summary:** This gene encodes a protein that belongs to the homeobox family of transcription factors. The encoded protein plays a role in the development and patterning of the head. This protein regulates development of the choroid plexuses in the brain affecting composition of cerebrospinal fluid in the developing brain and is thought to function in the development of sense organs in the embryo. In humans, mutations in this gene are associated with pituitary hormone deficiency. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Nov 2013]

Transcript Variant: This variant (3) differs in the 5' UTR and uses an alternate in-frame splice site in the 5' coding region compared to variant 1. The encoded protein (isoform b) is shorter than isoform a. Variants 2, 3 and 4 encode the same protein.