

Product datasheet for **MR229022**

Otx2 (NM_001286482) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Otx2 (NM_001286482) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Otx2
Synonyms:	E130306E05Rik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR229022 representing NM_001286482 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGATGTCTTATCTAAAGCAACCGCCTTACGCAGTCAATGGGCTGAGTCTGACCACTTCGGGTATGGACT
TGCTGCATCCCTCCGTGGGCTACCCCGCCACCCCGGAAACAGCGAAGGGAGAGGACGACATTTACTAG
GGCACAGCTCGACGTTCTGGAAGCTCTGTTTGCCAAGACCCGGTACCCAGACATCTTCATGAGGGAAGAG
GTGGCACTGAAAATCAACTTGCCAGAATCCAGGGTGCAGGTATGGTTTAAAGATCGAAGAGCTAAGTGCC
GCCAACAGCAGCAGCAGCAGCAGAATGGAGGTGAGAACAAGTGAGGCCCTGCCAAGAAGAAGAGCTCTCC
AGCTCGGGAAGTGAGTTCAGAGAGTGGAACAAGTGCCAGTTCAGTCCCCCTCTAGTACCTCAGTCCCA
ACCATTGCCAGCAGCAGTGTCCAGTGTCTATCTGGAGCCAGCGTCCATCTCCCACTGTCTGACCCCT
TGTCCACTTCTCCTCCTGCATGCAGAGGTCTATCCCATGACCTATACTCAGGCTTCAGGTTATAGTCA
AGGCTATGCTGGCTCAACTTCTACTTTGGGGCATGGACTGTGGATCTTATTTGACCCCTATGCATCAC
CAGTTCCTGGACCAGGGGCCCACTCAGTCCCATGGTACCAATGCTGTTACCAGCCATCTCAATCAGT
CCCCAGTTCCTTTCCACCCAGGGATATGGAGCTTCAAGCTTGGGTTTAACTCAACCAGTATTGCTT
GGATTATAAGGACCAAACTGCCTCTTGAAGCTTAACTCAATGCTGACTGCTTGGATTATAAGATCAG
ACGTCCTCATGGAAATCCAGGTTTTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR229022 representing NM_001286482
Red=Cloning site Green=Tags(s)

MMSYLKQPPYAVNGLSLTTSGMDLLHPSVGYPATPRKQRRERTTFTRAQLDVLEALFAKTRYPDIFMREE
 VALKINLPESRVQVWFKNRRAKCRQQQQQNGGQNKVRPAKKKSSPAREVSSSESGTSGQFSPSSSTSVP
 TIASSAPVSIWSPASISPLSDPLSTSSSCMQRSYPMTYTQASGYSQGYAGSTSYFGGMDCGSYLTPMH
 QLPGPGATLSPMGTAVTSHLNQSPASLSTQGYGASSLGFNSTTDCLDYKDQTASWKLNFNADCLDYKDQ
 TSSWKFQVL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



ACCN: NM_001286482

ORF Size: 867 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_001286482.1](#), [NP_001273411.1](#)

RefSeq Size: 2317 bp

RefSeq ORF: 870 bp

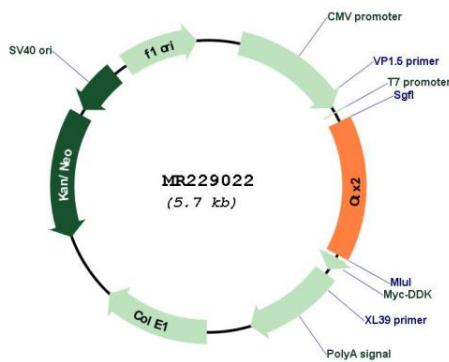
Locus ID: 18424

Cytogenetics: 14 25.36 cM

MW: 31.6 kDa

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]

Product images:



Circular map for MR229022