

Product datasheet for **SC304972**

ALX4 (NM_021926) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: ALX4 (NM_021926) Human Untagged Clone
Tag: Tag Free
Symbol: ALX4
Synonyms: CRS5; FND2
Mammalian Cell Selection: None
Vector: [pCMV6-XL5](#)
E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_021926 edited
 CAGGCATGAATGCTGAGACTTGGCTCTTACTGCGAGTCGCCGGCCGCTGCCATGGACG
 CCTACTACAGCCCGGTGTCGCAGAGTCGGGAGGGCTCGTCGCCTTTTAGGGCATTCCCG
 GAGGCGACAAGTTCGGCACAACTTTCCTGTCGGCCCGCCGCAAAGCACAGGGATTTCGGGG
 ACGCCAAGAGCCGGGCCGTTACGGCGCTGGGCAGCAGGACCTGGCGACACCCCTGGAGA
 GTGGAGCTGGGGCGGGGCTCCTTTAACAAAGTCCAGCCCCAGCCGTCGACCCCGCAGC
 CCCAGCCCGCCGCGAGCCGAGCCGAGCAGCAGCAGCAGCCGAGCCCGCCGCGC
 AACCGCATCTTTACTTGCAGCGAGGCGCCTGCAAGACGCCCCGGACGGCAGCCTCAAAC
 TCCAGGAAGGCAGCAGCGGCCACAGCGCGCCTTGCAAGTTCCTGCTACGCTAAAGAGA
 GCTCCCTGGGTGAGCCAGAGTTACCCCTGACTCTGACTGTGGGGATGGACAGCAGCT
 ACCTGAGTGTCAAGGAGGCTGGGGTGAAGGGGCCAGGACCGGGCCAGCTCAGACCTCC
 CCAGCCATTGGAGAAGGCCGACTCAGAGAGCAACAAGGCAAGAAGCGGCGGAACCGGA
 CCACCTTCACCAGCTACCAGCTGGAGGAGCTGGAGAAGGTCTTCCAGAAGACCCACTACC
 CAGACGTGATGCGCGGGAACAGCTGGCCATGAGGACAGACCTCACTGAGGCCCGCGTGC
 AGGTCTGGTTCCAGAACC GAAGGGCCAAGTGGAGGAAGCGGGAGCGTTTTGGGCAGATGC
 AGCAGGTTCGAACCCACTTCTCCACTGCATATGAGCTGCCCTCCTCACCCGAGCTGAGA
 ACTACGCCAGATT CAGAACCCGTCCTGGCTCGGCAACAACGGGGCTGCCTCACCAGTGC
 CAGCCTGCGTGGTCCCTGCGACCCGGTGCCTGCCTGCATGTCCCTCATGCCACCCCC
 CTGGCTCTGGGGCCAGCAGCGTACCCGACTTCTGAGTGTGCTGGGGCTGGCAGTCAG
 TGGGCCAGACGCACATGGGCAGCCTGTTTGGAGCAGCCAGCCTCAGCCAGGCCTCAATG
 GCTACGAGCTCAACGGCGAGCCGACCGCAAGACCTCGAGCATCGCGGCCCTCCGCATGA
 AGGCCAAGGAGCACAGTGCGCCATTTCTGGGCCACATGATCTAGA

Restriction Sites: Please inquire
ACCN: NM_021926
Insert Size: 1250 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 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](#)

OTI Annotation: The ORF of this clone has been fully sequenced and found to be a perfect match to NM_021026.2.

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_021926.2](#), [NP_068745.2](#)

RefSeq Size: 1586 bp

RefSeq ORF: 1236 bp

Locus ID: 60529

UniProt ID: [Q9H161](#)

Cytogenetics: 11p11.2

Protein Families: Druggable Genome

Gene Summary:

This gene encodes a paired-like homeodomain transcription factor expressed in the mesenchyme of developing bones, limbs, hair, teeth, and mammary tissue. Mutations in this gene cause parietal foramina 2 (PFM2); an autosomal dominant disease characterized by deficient ossification of the parietal bones. Mutations in this gene also cause a form of frontonasal dysplasia with alopecia and hypogonadism; suggesting a role for this gene in craniofacial development, mesenchymal-epithelial communication, and hair follicle development. Deletion of a segment of chromosome 11 containing this gene, del(11)(p11p12), causes Potocki-Shaffer syndrome (PSS); a syndrome characterized by craniofacial anomalies, cognitive disability, multiple exostoses, and genital abnormalities in males. In mouse, this gene has been shown to use dual translation initiation sites located 16 codons apart. [provided by RefSeq, Oct 2009]