

Product datasheet for SC309536

PAX3 (NM 013942) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: PAX3 (NM_013942) Human Untagged Clone

Tag: Tag Free Symbol: PAX3

Synonyms: CDHS; HUP2; WS1; WS3

Vector: pCMV6 series

>NCBI ORF sequence for NM_013942, the custom clone sequence may differ by one or more **Fully Sequenced ORF:**

nucleotides

ATGACCACGCTGGCCGGCGCTGTGCCCAGGATGATGCGGCCGGGCCCGGGCCAGAACTAC CCGCGTAGCGGGTTCCCGCTGGAAGTGTCCACTCCCCTCGGCCAGGGCCGCGTCAACCAG CTCGGCGGTGTTTTTATCAACGGCAGGCCGCTGCCCAACCACATCCGCCACAAGATCGTG GAGATGGCCCACCACGGCATCCGGCCCTGCGTCATCTCGCGCCAGCTGCGCGTGTCCCAC GGCTGCGTCTCCAAGATCCTGTGCAGGTACCAGGAGACTGGCTCCATACGTCCTGGTGCC ATCGGCGGCAGCAAGCCCAAGCAGGTGACAACGCCTGACGTGGAGAAGAAAATTGAGGAA TACAAAAGAGAGAACCCGGGCATGTTCAGCTGGGAAATCCGAGACAAATTACTCAAGGAC GCGGTCTGTGATCGAAACACCGTGCCGTCAGTGAGTTCCATCAGCCGCATCCTGAGAAGT

TCCGGAGTTTCCTCGCATTAA

Restriction Sites: Please inquire ACCN: NM 013942

OTI Disclaimer: 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).

OTI Annotation: 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.

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).



OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com



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: <u>NM 013942.2</u>, <u>NP 039230.1</u>

RefSeq Size: 1080 bp
RefSeq ORF: 621 bp
Locus ID: 5077
UniProt ID: P23760
Cytogenetics: 2q36.1

Protein Families: Adult stem cells, Druggable Genome, Embryonic stem cells, ES Cell Differentiation/IPS,

Transcription Factors

Gene Summary: This gene is a member of the paired box (PAX) family of transcription factors. Members of the

PAX family typically contain a paired box domain and a paired-type homeodomain. These genes play critical roles during fetal development. Mutations in paired box gene 3 are associated with Waardenburg syndrome, craniofacial-deafness-hand syndrome, and alveolar rhabdomyosarcoma. The translocation t(2;13)(q35;q14), which represents a fusion between PAX3 and the forkhead gene, is a frequent finding in alveolar rhabdomyosarcoma. Alternative splicing results in transcripts encoding isoforms with different C-termini. [provided by RefSeq,

Jul 2008]

Transcript Variant: This variant (PAX3B) differs in the 3' UTR, includes an alternate segment in the coding region, which causes a frameshift, and lacks several segments in the 3' coding region, compared to variant PAX3. The resulting protein (isoform PAX3a) has a shorter and distinct C-terminus, compared to isoform PAX3. Isoform PAX3b lacks the paired-type

homeodomain.