

Product datasheet for RC237447

PAX5 (NM 001280549) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: PAX5 (NM_001280549) Human Tagged ORF Clone

Tag: Myc-DDK

Symbol: PAX5

Synonyms: ALL3; BSAP

Vector:pCMV6-Entry (PS100001)E. coli Selection:Kanamycin (25 ug/mL)

Cell Selection: Neomycin

ORF Nucleotide >RC237447 representing NM_001280549
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

ATGGATTTAGAGAAAAATTATCCGACTCCTCGGACCAGCAGGACAGGACATGGAGGAGTGAATCAGCTTG
GGGGGGTTTTTGTGAATGGACGGCCACTCCCGGATGTAGTCCGCCAGAGGATAGTGGAACTTGCTCATCA
AGGTGTCAGGCCCTGCGACATCTCCAGGCAGCTTCGGGTCAGCCATGGTTGTTCAGCAAAATTCTTGGC
AGGTATTATGAGACAGGAAGCATCAAGCCTGGGGTAATTGGAGGATCCAAACCAAAGGTCGCCACACCCA
AAGTGGTGGAAAAAATCGCTGAATATAAACGCCAAAATCCCACCATGTTTGCCTGGGAGATCAGGGACCG
GCTGCTGGCAGAGCGGGTGTGTGACAATGACACCGTGCCTAGCGTCAGTTCCATCAACAGGATCATCCGG
ACAAAAGTACAGCAGCCACCCAACCAACCAGTCCCAGCTTCCAGTCACAGCATAGTGTCCACTGGCTCCG
TGACGCAGGTGTCCTCGGTGAGCACCGAACCAACCAGCATCCTCGTACTCCATCAGCGGCATCCTGGGCAT
CACGTCCCCCAGCGCCGACACCAACAAGCGCAAGAGAGAAGAGAAGTATTCAGGAGTCTCCGGTGCCGAAC
GGCCACTCGCTTCCGGGCAGAGACTTCCTCCGGAAGCAGATGCGGGGAGACTTGTTCACACAGCAGCAGC
TGGAGGTGCTGGACCGCGTGTTTGAGAGGCAGCACTACTCAGACATCTTCACCACCACAGAGCCCATCAA
GCCCGAGCAGGGAGTGAGTTTTCCGGGAGTCCCTACAGCCACCCTCAGTATTCCTCGTACAACGACTCCT
GGAGGTTCCCCAACCCGGGGCTGCTTGGCTCCCCCTACTATTATAGCGCTGCCGCCCCGAGGAGCCCCCC
ACCTGCAGCCGCCACTGCCTATGACCGTCACTGACCCTTGGAGCCAGCAGCACCAAAACAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC237447 representing NM_001280549

Red=Cloning site Green=Tags(s)

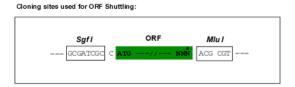
MDLEKNYPTPRTSRTGHGGVNQLGGVFVNGRPLPDVVRQRIVELAHQGVRPCDISRQLRVSHGCVSKILG RYYETGSIKPGVIGGSKPKVATPKVVEKIAEYKRQNPTMFAWEIRDRLLAERVCDNDTVPSVSSINRIIR TKVQQPPNQPVPASSHSIVSTGSVTQVSSVSTDSAGSSYSISGILGITSPSADTNKRKRDEGIQESPVPN GHSLPGRDFLRKQMRGDLFTQQQLEVLDRVFERQHYSDIFTTTEPIKPEQGVSFPGVPTATLSIPRTTTP GGSPTRGCLAPPTIIALPPEEPPHLQPPLPMTVTDPWSQAGTKH

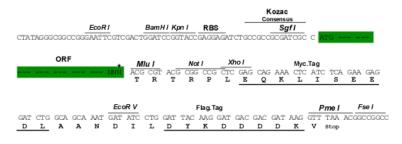
TRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

Restriction Sites:

Sgfl-Mlul

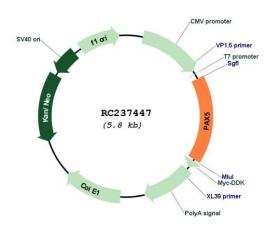
Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

Plasmid Map:



ACCN: NM_001280549

ORF Size: 972 bp

PAX5 (NM_001280549) Human Tagged ORF Clone - RC237447

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: <u>NM 001280549.2</u>

RefSeq Size: 8677 bp
RefSeq ORF: 975 bp
Locus ID: 5079

UniProt ID: Q02548

Cytogenetics: 9p13.2

Protein Families: Transcription Factors

MW: 35.7 kDa

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

central feature of this gene family is a novel, highly conserved DNA-binding motif, known as

the paired box. Paired box transcription factors are important regulators in early

development, and alterations in the expression of their genes are thought to contribute to neoplastic transformation. This gene encodes the B-cell lineage specific activator protein that is expressed at early, but not late stages of B-cell differentiation. Its expression has also been detected in developing CNS and testis and so the encoded protein may also play a role in neural development and spermatogenesis. This gene is located at 9p13, which is involved in t(9;14)(p13;q32) translocations recurring in small lymphocytic lymphomas of the plasmacytoid subtype, and in derived large-cell lymphomas. This translocation brings the potent E-mu enhancer of the IgH gene into close proximity of the PAX5 promoter, suggesting that the

deregulation of transcription of this gene contributes to the pathogenesis of these lymphomas. Alternative splicing results in multiple transcript variants encoding different

isoforms. [provided by RefSeq, Jul 2013]