

Product datasheet for **KN222785**

PAX5 Human Gene Knockout Kit (CRISPR)

Product data:

Product Type:	Knockout Kits (CRISPR)
Format:	2 gRNA vectors, 1 GFP-puro donor, 1 scramble control
Donor DNA:	GFP-puro
Symbol:	PAX5
Locus ID:	5079
Components:	<p>KN222785G1, PAX5 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002), Target Sequence: GACAGGTAGGACCGCGATAC</p> <p>KN222785G2, PAX5 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002), Target Sequence: TGTCCCGGAGTTTGACATC</p> <p>KN222785D, donor DNA containing left and right homologous arms and GFP-puro functional cassette.</p>

Homologous arm and GFP-puro sequences:

pUC vector backbone in gray; **Left arm sequence in blue**; **GFP-puro in green**; **Right arm in violet**

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AGAAGTAAGT TGGCCGAGT GTTATCACTC ATGGTTATGG CAGCACTGCA TAATTCTCTT ACTGTCATGC
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 AGCTCCGGTT CCAACGATC

GE100003, scramble sequence in pCas-Guide vector

Disclaimer:

These products are manufactured and supplied by OriGene under license from ERS. The kit is designed based on the best knowledge of CRISPR technology. The system has been functionally validated for knocking-in the cassette downstream the native promoter. The efficiency of the knock-out varies due to the nature of the biology and the complexity of the experimental process.

RefSeq:

[NM_001280547](#), [NM_001280548](#), [NM_001280549](#), [NM_001280550](#), [NM_001280551](#),
[NM_001280552](#), [NM_001280553](#), [NM_001280554](#), [NM_001280555](#), [NM_001280556](#),
[NM_016734](#), [NR_103999](#), [NR_104000](#)

UniProt ID:

[Q02548](#)

Synonyms:

ALL3; BSAP

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]

Product images:
