

## Product datasheet for **KN222717LP**

### **DOCK3 Human Gene Knockout Kit (CRISPR)**

#### **Product data:**

<b>Product Type:</b>	Knockout Kits (CRISPR)
<b>Format:</b>	2 gRNA vectors, 1 Luciferase-Puro donor, 1 scramble control
<b>Donor DNA:</b>	Luciferase-Puro
<b>Symbol:</b>	DOCK3
<b>Locus ID:</b>	1795
<b>Components:</b>	<b>KN222717G1</b> , DOCK3 gRNA vector 1 in pCas-Guide CRISPR vector (GE100002) <b>KN222717G2</b> , DOCK3 gRNA vector 2 in pCas-Guide CRISPR vector (GE100002) <b>KN222717LPD</b> , donor DNA containing left and right homologous arms and Luciferase-Puro functional cassette. <b>GE100003</b> , scramble sequence in pCas-Guide vector
<b>Disclaimer:</b>	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.
<b>RefSeq:</b>	<a href="#">NM_004947</a>
<b>UniProt ID:</b>	<a href="#">Q8IZD9</a>
<b>Synonyms:</b>	MOCA; PBP
<b>Summary:</b>	This gene is specifically expressed in the central nervous system (CNS). It encodes a member of the DOCK (dedicator of cytokinesis) family of guanine nucleotide exchange factors (GEFs). This protein, dedicator of cytokinesis 3 (DOCK3), is also known as modifier of cell adhesion (MOCA) and presenilin-binding protein (PBP). The DOCK3 and DOCK1, -2 and -4 share several conserved amino acids in their DHR-2 (DOCK homology region 2) domains that are required for GEF activity, and bind directly to WAVE proteins [Wiskott-Aldrich syndrome protein (WASP) family Verprolin-homologous proteins] via their DHR-1 domains. The DOCK3 induces axonal outgrowth in CNS by stimulating membrane recruitment of the WAVE complex and activating the small G protein Rac1. This gene is associated with an attention deficit hyperactivity disorder-like phenotype by a complex chromosomal rearrangement. [provided by RefSeq, Aug 2010]



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## Product images:

