

## Product datasheet for **RG216097**

### KPI2 (LMTK2) (NM\_014916) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	KPI2 (LMTK2) (NM_014916) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	KPI2
Synonyms:	AATYK2; BREK; cprk; hBREK; KPI-2; KPI2; LMR2; PPP1R100
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG216097 representing NM_014916 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

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ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:** >RG216097 representing NM\_014916  
 Red=Cloning site Green=Tags(s)

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```

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shutting:

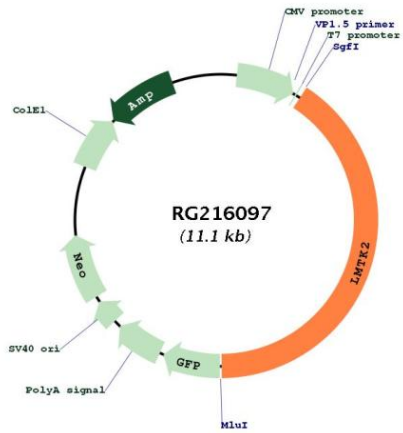


**ACCN:** NM\_014916

**ORF Size:** 4509 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_014916.2</a> , <a href="#">NP_055731.2</a>
<b>RefSeq Size:</b>	5602 bp
<b>RefSeq ORF:</b>	4512 bp
<b>Locus ID:</b>	22853
<b>UniProt ID:</b>	<a href="#">Q8IWU2</a>
<b>Cytogenetics:</b>	7q21.3
<b>Domains:</b>	pkinase, TyrKc, S_TKc
<b>Protein Families:</b>	Druggable Genome, Protein Kinase, Transmembrane
<b>Gene Summary:</b>	The protein encoded by this gene belongs to the protein kinase superfamily and the protein tyrosine kinase family. It contains N-terminal transmembrane helices and a long C-terminal cytoplasmic tail with serine/threonine/tyrosine kinase activity. This protein interacts with several other proteins, such as Inhibitor-2 (Inh2), protein phosphatase-1 (PP1C), p35, and myosin VI. It phosphorylates other proteins, and is itself also phosphorylated when interacting with cyclin-dependent kinase 5 (cdk5)/p35 complex. This protein involves in nerve growth factor (NGF)-TrkA signalling, and also plays a critical role in endosomal membrane trafficking. Mouse studies suggested an essential role of this protein in spermatogenesis. [provided by RefSeq, Oct 2009]

Product images:



Circular map for RG216097