

Product datasheet for **RG204537**

ITPK1 (NM_014216) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ITPK1 (NM_014216) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ITPK1
Synonyms:	ITRPK1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG204537 representing NM_014216 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCAGACCTTTCTGAAAGGGAAGAGAGTTGGCTACTGGCTGAGCGAGAAGAAAAAACAAGAAGCTGAATT
TCCAGGCCTTCGCCGAGCTGTGCAGGAAGCGAGGGATGGAGGTTGTGCAGCTGAACCTTAGCCGGCCGAT
CGAGGAGCAGGGCCCCCTGGACGTCATCATCCACAAGCTGACTGACGTCATCCTTGAAGCCGACCAGAAT
GATAGCCAGTCCCTGGAGCTGGTGCACAGGTTCCAGGAGTACATCGATGCCACCCTGAGACCATCGTCC
TGGACCCGCTCCCTGCCATCAGAACCTGCTTGACCGCTCCAAGTCTATGAGCTCATCCGGAAGATTGA
GGCTACATGGAAGACGACAGGATCTGCTCGCCACCCTTCATGGAGCTCAGGAGCCTGTGCGGGGATGAC
ACCATGCGGCTGCTGGAGAAGAACGGCTTGACTTTCCATTTCATTTGAAAACCAGAGTGGCTCATGGCA
CCAACTCTCACGAGATGGCTATCGTGTTCAACCAGGAGGGCTGAACGCCATCCAGCCACCCTGCGTGGT
CCAGAATTTATCAACCACAACGCCGCTCCTGTACAAGGTGTTTCGTGGTTGGCGAGTCTACACCGTGGTC
CAGAGGCCCTCACTCAAGAACTTCTCCGAGGCACATCAGACCGTGAGTCCATCTTCTTCAACAGCCACA
ACGTGTCAAAGCCGGAGTCGTATCGGTCTGACGGAGCTGGACAAGATCGAGGGCGTGTTCGAGCGGCC
GAGCGACGAGGTCATCCGGGAGCTCTCCCGGCCCTGCGGCAGGCACTGGCGGTGTCCTTCCGATC
GACATCATCATCAACAACAGACAGGGCAGCAGCCGTCATTGACATCAATGCCTTCCAGGCTACGAGG
GGTGAGCGAGTTCTTACAGACCTCCTGAACCACATCGCCACTGCTGTCAGGGCCAGAGCACAGCCAT
GGCAGCCACAGGGGACGTGGCCCTGCTGAGGCACAGCAAGCTTCTGGCCGAGCCGGCGGGCCGCTGGT
GGCGAGCGGACATGCAGCGCCAGCCCGGCTGCTGCGGCAGCATGATGGCCAGGACGCGCCCTGGAAGG
CTGAGGCCGACGCGGGCGGCCACCACCAAGCTGCCGACACAGAGACTCGGCTGCAACGCCGGCGTGTCCG
CAGCTTCCAGCAGCATTGTGTGGCTCCCTGGCCACCAAGGCCTCCTCCAG

ACGGTACGGGCCGCTCGAG - GFP Tag - GTTTAA



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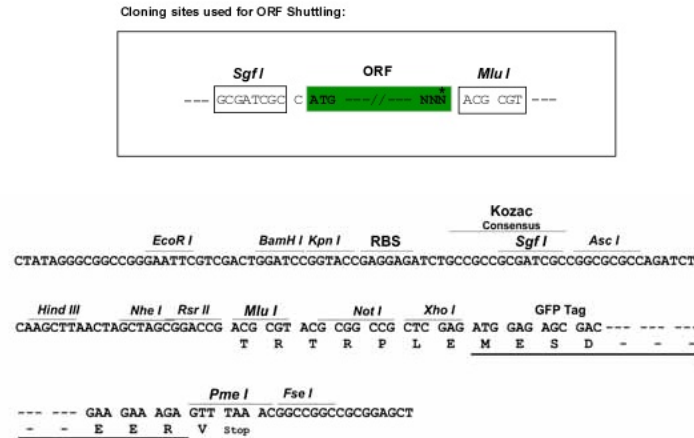
Protein Sequence: >RG204537 representing NM_014216
 Red=Cloning site Green=Tags(s)

MQTFLKGRVGYWLSEKKIKKLNFAELCRKRGMEVVQLNLSRPIEEQGPLDVIHKLTDVILEADQN
 DSQSLELVHRFQEYIDAHPETIVLDPLPAIRTLDRSKSYELIRKIEAYMEDDRICSPFMELTSKCGDD
 TMRLLLEKNGLTFFPFICKTRVAHGNTSHEMAIVFNQEGLNAIQPCVVQNFINHNAVLYKVFVVGESYTVV
 QRPSLKNFSAGTSDRESIFFNSHNVSKEPSSSVLTELDKIEGVFERPSDEVIRELSRALRQALGVSLEFGI
 DIIINNQTGQHAVIDINAFPGYEGVSEFFDILLNHIATVQLQGQSTAMAATGDVALLRHSKLLAEPAGGLV
 GERTCSASPGCCGSMGQDAPWKAADAGGTAKLPHQRLGCNAGVSPSFQQHCVASLATKASSQ

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_014216

ORF Size: 1242 bp

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: [NM_014216.6](#)

RefSeq Size: 3197 bp

RefSeq ORF: 1245 bp

Locus ID: 3705

UniProt ID: [Q13572](#)

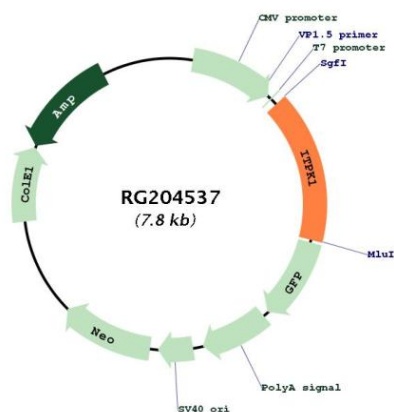
Cytogenetics: 14q32.12

Protein Families: Druggable Genome

Protein Pathways: Inositol phosphate metabolism, Metabolic pathways, Phosphatidylinositol signaling system

Gene Summary: This gene encodes an enzyme that belongs to the inositol 1,3,4-trisphosphate 5/6-kinase family. This enzyme regulates the synthesis of inositol tetraphosphate, and downstream products, inositol pentakisphosphate and inositol hexakisphosphate. Inositol metabolism plays a role in the development of the neural tube. Disruptions in this gene are thought to be associated with neural tube defects. A pseudogene of this gene has been identified on chromosome X. [provided by RefSeq, Jul 2016]

Product images:



Circular map for RG204537