

Product datasheet for RC213831L3

PAK1 (NM_002576) Human Tagged Lenti ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PAK1 (NM_002576) Human Tagged Lenti ORF Clone
Tag:	Myc-DDK
Symbol:	PAK1
Synonyms:	alpha-PAK; IDDMSSD; p65-PAK; PAKalpha
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-Myc-DDK-P2A-Puro (PS100092)
E. coli Selection:	Chloramphenicol (34 ug/mL)
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC213831).
Restriction Sites:	SgfI-MluI
Cloning Scheme:	

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF.

ACCN:	NM_002576
ORF Size:	1019 bp



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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:	<ol style="list-style-type: none">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_002576.3
RefSeq Size:	3264 bp
RefSeq ORF:	1638 bp
Locus ID:	5058
UniProt ID:	Q13153
Cytogenetics:	11q13.5-q14.1
Domains:	PBD, pkinase, TyrKc, S_TKc
Protein Families:	Druggable Genome, Protein Kinase, Stem cell - Pluripotency
Protein Pathways:	Axon guidance, Chemokine signaling pathway, Epithelial cell signaling in Helicobacter pylori infection, ErbB signaling pathway, Fc gamma R-mediated phagocytosis, Focal adhesion, MAPK signaling pathway, Natural killer cell mediated cytotoxicity, Regulation of actin cytoskeleton, Renal cell carcinoma, T cell receptor signaling pathway
MW:	34.58 kDa
Gene Summary:	This gene encodes a family member of serine/threonine p21-activating kinases, known as PAK proteins. These proteins are critical effectors that link RhoGTPases to cytoskeleton reorganization and nuclear signaling, and they serve as targets for the small GTP binding proteins Cdc42 and Rac. This specific family member regulates cell motility and morphology. Mutations in this gene have been associated with macrocephaly, seizures, and speech delay. Overexpression of this gene is also reported in many cancer types, and particularly in breast cancer. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Aug 2020]