

Product datasheet for **RC218969**

PTPN22 (NM_015967) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	PTPN22
Synonyms:	LYP; LYP1; LYP2; PEP; PTPN8; PTPN22.5; PTPN22.6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide
Sequence:**

>RC218969 representing NM_015967.

Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGCACTG
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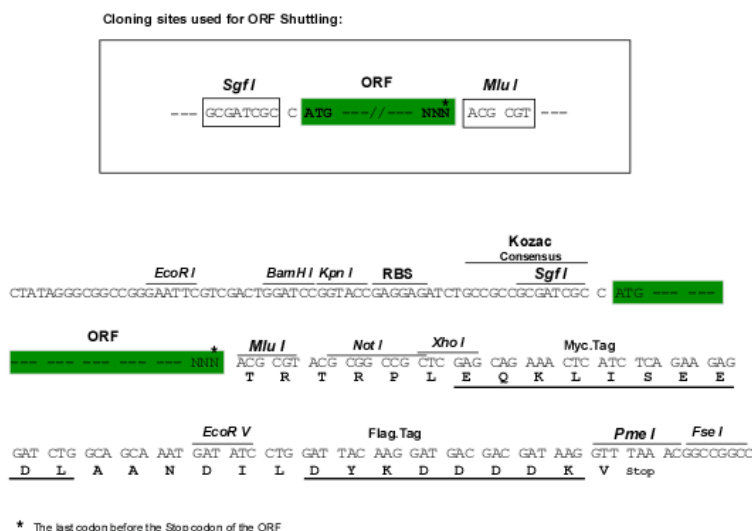
Protein Sequence: >Peptide sequence encoded by RC218969
Blue=ORF Red=Cloning site Green=Tag(s)

MDQREILQKFLDEAQSKKITKEEFANEFLLKLRQSTKYKADKTYPTTVAEKPKNIKKNRYKDILPYDYS
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Chromatograms: https://cdn.origene.com/chromatograms/mg4339_d04.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:



ACCN: NM 015967

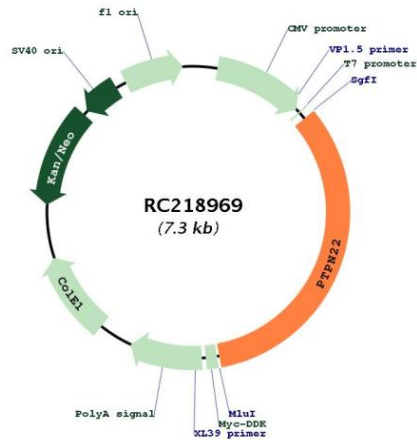
ORF Size: 2421 bp

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](#)

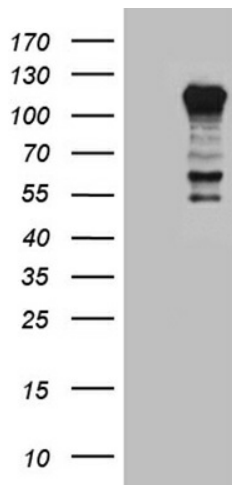
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_015967.7</u>
RefSeq Size:	3615 bp
RefSeq ORF:	2424 bp
Locus ID:	26191
UniProt ID:	<u>Q9Y2R2</u>
Cytogenetics:	1p13.2
Domains:	Y_phosphatase, PTPc_motif
Protein Families:	Druggable Genome, Phosphatase
MW:	91.7 kDa
Gene Summary:	This gene encodes of member of the non-receptor class 4 subfamily of the protein-tyrosine phosphatase family. The encoded protein is a lymphoid-specific intracellular phosphatase that associates with the molecular adapter protein CBL and may be involved in regulating CBL function in the T-cell receptor signaling pathway. Mutations in this gene may be associated with a range of autoimmune disorders including Type 1 Diabetes, rheumatoid arthritis, systemic lupus erythematosus and Graves' disease. Alternatively spliced transcript variants encoding distinct isoforms have been described. [provided by RefSeq, Mar 2009]

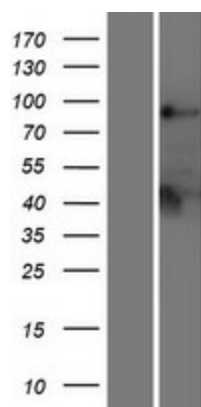
Product images:



Circular map for RC218969



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PTPN22 (Cat# RC218969, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PTPN22 antibody (Cat# [TA810177]). Positive lysates [LY414274] (100ug) and [LC414274] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY414274]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC218969 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).