

Product datasheet for **RR201868**

Ist1 (NM_001017454) Rat Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Ist1 (NM_001017454) Rat Tagged ORF Clone
Tag: Myc-DDK
Symbol: Ist1
Synonyms: RGD1307799
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RR201868 representing NM_001017454
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGCTGGGCTCTGGTTTCAAAGCTGAGCGCTTACGAGTCAATTTGAGATTAGTTATAAATCGTCTTAAAC
TGTTGGAGAAAAAAAAACGGAAGTGGCTCAAAAAGCGAGGAAGGAGATTGCTGACTATCTGGCCGCTGG
GAAGGACGAGAGACACGTATCCGTGTGGAGCACATAATCCGGGAAGACTACCTTGTGGAGGCCATGGAG
ATCCTGGAGCTGTACTGTGACCTGCTGGCTCGGTTTGGCCTTATCCAGTCTATGAAGGAGCTAGATT
CTGGTCTGGCTGAATCTGTGTCTACACTGATCTGGGCCGCTCCTCGGTTGCAGTCAGAAGTGGCTGAGTT
GAAAATAGTTGCTGATCAGCTCTGTGCCAAATACAGCAAGGAATATGGCAAGTTGTGCAGGACCAACCAG
ATCGGGACTGTGAATGATAGGCTAATGCATAAACTGAGTGTAGAAGCCCCACCCAAGATCCTAGTGGAGA
GATACCTGATTGAAATTGCCAAGAATTACAATGTGCCCTATGAACCTGACTCTGTGGTCATGGCAGAAGC
TCCCGTTGGAGTGGAGACAGATCTTATTGATGTTGGATTTACAGATGATGTGAAGAAAGGTGGTCTGGA
AGAGGAGGAGGGGGCGGTTTACAGCCCCAGTTGGTGCACCTGATGGACCATGCCATGCCATGCCCA
TGCCCATGCCATGCCATGCCATCTCCAAATGCTCCCTTCGCATACCCACTGCCAAAGGACCATCGGA
TTTCAGTGGATTGCCAGTGGGGACTTACCAGCCCTTTCCTAACATTCACCCACCCAGATACCAGCAACT
CCCCATCTTACGAATCTGTTGATGACATTAATGCTGATAAAAAATGTTTCTTCGGCACAGATTGTTGGAC
CCAAGCCAGAAGCTCCTGCAAAGCCCCCTTCCAGACCTGTGGATAACTACAACACCTTTGTACTGCCAGA
GTTGCCATCGGTGCCAGACACACTCCCAGCCGATCTGCCGGAGCCAGTACCTCGGCGTCAGAGGACATA
GACTTTGATGATCTTCCCGGAGATTTGAGGAGCTGAAAAAGAAAACAGACTTTGATGATCTTCCCGGA
GATTTGAGGAGCTGAAAAAGAAAACA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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MLGSGFKAERLRVNLRLVINRLKLEKKKTELAQKARKEIADYLAAGKDERARIRVEHI IREDYLVEAME
 ILELYCDLLLARFGLIQSMKELDSGLAESVSTLIWAAPRLQSEVAELKIVADQLCAKYSKEYGKLCRTNQ
 IGTVNDRLMHKLSVEAPPKILVERYLIEIAKNYNVPYEPDSVVMMAEAPVGVETDLIDVGFDDVKKGGPG
 RGGGGFTAPVGA PDGTM PMPMPMPMPSPSPNAPFAYPLPKGPSDF SGLPVGTYQAFN IHPPIPAT
 PPSYESVDDINADKNVSSAQIVGPKPEAPAKPPSRPVDNYNTFVLPPELPSVPTLPTASAGASTASEDI
 DFDDL SRRFEELKKKTFDDL SRRFEELKKK T

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

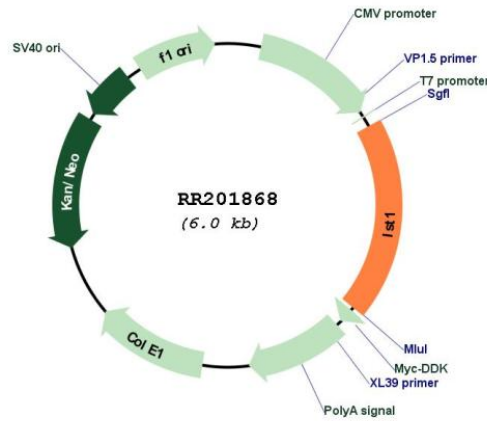
Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001017454

ORF Size:	1098 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:	<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 Size:	2261 bp
RefSeq ORF:	1101 bp
Locus ID:	307833
UniProt ID:	Q568Z6
Cytogenetics:	19q12
MW:	39.9 kDa
Gene Summary:	ESCRT-III-like protein involved in specific functions of the ESCRT machinery. Is required for efficient abscission during cytokinesis, but not for HIV-1 budding. The involvement in the MVB pathway is not established. Involved in recruiting VPS4A and/or VPS4B to the midbody of dividing cells. During late anaphase, involved in nuclear envelope reassembly and mitotic spindle disassembly together with the ESCRT-III complex: IST1 acts by mediating the recruitment of SPAST to the nuclear membrane, leading to microtubule severing. Regulates early endosomal tubulation together with the ESCRT-III complex by mediating the recruitment of SPAST.[UniProtKB/Swiss-Prot Function]