

## Product datasheet for **RN201868**

### Ist1 (NM\_001017454) Rat Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Ist1 (NM\_001017454) Rat Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Ist1  
**Synonyms:** RGD1307799  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**Fully Sequenced ORF:** >RN201868 representing NM\_001017454  
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGGATCGCC**

ATGCTGGGCTCTGGTTTCAAAGCTGAGCGCTTACGAGTCAATTTGAGATTAGTTATAAATCGTCTTAAAC  
TGTTGGAGAAAAAAAAACGGAAGTGGCTCAAAAAGCGAGGAAGGAGATTGCTGACTATCTGGCCGCTGG  
GAAGGACGAGAGACACGTATCCGTGTGGAGCACATAATCCGGGAAGACTACCTTGTGGAGGCCATGGAG  
ATCCTGGAGCTGTACTGTGACCTGCTGCTGGCTCGGTTTGGCCTTATCCAGTCTATGAAGGAGCTAGATT  
CTGGTCTGGCTGAATCTGTGTCTACACTGATCTGGGCCGCTCCTCGGTTGCAGTCAGAAGTGGCTGAGTT  
GAAAATAGTTGCTGATCAGCTCTGTGCCAAATACAGCAAGGAATATGGCAAGTTGTGCAGGACCAACCAG  
ATCGGGACTGTGAATGATAGGCTAATGCATAAACTGAGTGTAGAAGCCCCACCCAAGATCCTAGTGGAGA  
GATACCTGATTGAAATTGCCAAGAATTACAATGTGCCCTATGAACCTGACTCTGTGGTCATGGCAGAAGC  
TCCCGTTGGAGTGGAGACAGATCTTATTGATGTTGGATTACAGATGATGTGAAGAAAGGTGGTCTGGA  
AGAGGAGGAGGGGGCGGGTTCACAGCCCCAGTTGGTGCACCTGATGGACCATGCCATGCCATGCCA  
TGCCCCATGCCATGCCATGCCATCTCCAAATGCTCCCTTCGCATACCCACTGCCAAAGGACCATCGGA  
TTTCAGTGGATTGCCAGTGGGGACTTACCAGGCCTTTCCTAACATTACCCACCCAGATACCAGCAACT  
CCCCATCTTACGAATCTGTTGATGACATTAATGCTGATAAAAAATGTTTCTTCGGCACAGATTGTTGGAC  
CCAAGCCAGAAGCTCCTGCAAAGCCCCCTCCAGACCTGTGGATAACTACAACACCTTTGTACTGCCAGA  
GTTGCCATCGGTGCCAGACACACTCCCAGCCGATCTGCCGGAGCCAGTACCTCGGCGTCAGAGGACATA  
GACTTTGATGATCTTCCCGGAGATTTGAGGAGCTGAAAAAGAAAACATAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-MluI  
**ACCN:** NM\_001017454



<b>Insert Size:</b>	1101 bp
<b>OTI Disclaimer:</b>	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
<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>	<u><a href="#">NM_001017454.2</a></u> , <u><a href="#">NP_001017454.1</a></u>
<b>RefSeq Size:</b>	2261 bp
<b>RefSeq ORF:</b>	1101 bp
<b>Locus ID:</b>	307833
<b>UniProt ID:</b>	<u><a href="#">Q568Z6</a></u>
<b>Cytogenetics:</b>	19q12
<b>Gene Summary:</b>	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]