

## Product datasheet for **SC120261**

### **p15 INK4b (CDKN2B) (NM\_078487) Human Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	p15 INK4b (CDKN2B) (NM_078487) Human Untagged Clone
Tag:	Tag Free
Symbol:	p15 INK4b
Synonyms:	CDK4I; INK4B; MTS2; P15; p15INK4b; TP15
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL4</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_078487, the custom clone sequence may differ by one or more nucleotides

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ATGCGCGAGGAGAACAAAGGGCATGCCAGTGGGGCGGCAGCGATGAGGGTCTGGCCAGCGCCGCGGCGC  
GGGGACTAGTGGAGAAGGTGCGACAGCTCCTGGAAGCCGGCGCGGATCCCAACGGAGTCAACCGTTTCGG  
GAGGCGCGCGATCCAGGTAGCTGGGGCCCCAGGGCCTCGCCGGCAGGGGGCGCGCAACGCGGGGCGCGG  
CCTCGGCGGATCGGGGCTGGAACCTAG
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<b>5' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 5' read for NM_078487 unedited            CAAATTTTGTATACGACTCACTATAGGCGGCCGGAATTCGCACCAGGCCGGCTGGCTCC            CCACTCTGCCAGAGCGAGGCGGGGCAGTGAGGACTCCGCGACGCGTCCGCACCCTGCGGC            CAGAGCGGCTTTGAGCTCGGCTCGCTCCGCGCTAGGCGCTTTTTCCAGAAGCAATCCAG            GCGCGCCCGCTGGTCTTGAGCGCCAGGAAAAGCCCGGAGCTAACGACCCGGCCGCTCGGC            CACTGCACGGGGCCCCAAGCCGCGAGAAGGACGACGGGAGGGTAATGAAGCTGAGCCGAG            TCTCCTAGGAAGGAGAGAGTGCGCCGGAGCAGCGTGGGAAAGAAGGGAAGAGTGTCTGTTA            AGTTTACGGCCAACGGTGGATTATCCGGGCCGCTGCGCGTCTGGGGCTGCGGAATGCGC            GAGGAGAACAAGGCATGCCAGTGGGGCGGCAGCGATGAGGGTCTGGCCAGCGCCGCG            GCGCGGGGACTAGTGAGAAGGTGCGACAGCTCCTGGAAGCCGGCGCGGATCCCAACGGA            GTCAACCGTTTCGGGAGGCGCGCATCCAGGTCATGATGATGGGCAGCGCCCGCTGGCG            GAGCTGCTGCTCCACGGCGCGGAGCCCAACTGCGCAGACCCTGCCACTCTCACCCGA            CCGGTGCATGATGCTGCCGGGAGGGCTTCTGGACACGCTGGTGGTCTGCACCCGGCC            GGGGCGCGGCTGGACGTGCGCGATGCCTGGGGTCTGCCCCTGGACTTGGCCGAGGAG            CGGGGCCACCGCGACCTGCAGGTTACCTGCGCCAGCCACGGGGGACTGACGCCAAGTTT            CCAAGCGCCACACGACTTATTTTTTACCATTTCACACCCACCACCTATTTCATGAGGC            TGCCACCGGGAGCGGCGGAAGCCTGTAGACTGCAACCTGTTTGGACTACAGAAGGGAGAG            CGCCA</p>
<b>3' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 3' read for NM_078487 unedited            AATACTGTAGTANCGCGCCGAATCGAGGGATCCGTTTTTTTTCTTTTTTTTTTTTTAA            TGTTATTTTATTTATAAATTTTAACTTGCCCGATCTCTTGAATAAATGTCAGGTAG            TAGAATTTGTACAAACCTTGGTAATGTCTTAGGTTTAGATACGAACTAACAGGTATATT            TAATTTCTGTATTCCACAATGGAGCTAGAAGCAGGACTCATGAAAATAGTAACTATATG            TTTTGCAGGTATCCTTCAAAGTGAAATCCTTAACAAAATTAACAGTATATATTAGGCTGC            TGATGAAACAGCTAAACCTGTCTGCCAGGTGGCTTCGAAAATGGAATTAATTTTTACATG            GCATTGATAAGTTACTATTTCAATGCCACCGACTGGTGATTGATACCCAATAATGTTTGA            GGTTTGTCTTACGGAAGAGAAATGACAAAACAATCACAAAGAAATGTAATGTAGTACTG            GGGATCCAGAAAACATATTTCTTAGATTACCCGAAAAACAAGTGCCGTTAAGAAGATT            CCAACATTTAATTAACACAAAAAATATGACATGTTCCAATATAGTTGATGGGAAAACATT            CATGGCCCGGTTAGAGCGGACGGCACAGGAGGGGAACGGCCCGCGGAAAAGCATACA            CAATCAAGGAGGATATATAAACGTGGAACCTATTTGACAGTAGCAACGAATTAATTTTAT            CACGATGGTCCCGCATGGTGCAGGTACGGGGAGGCTGAATAGGGATGCTTGCCTGGTCA            GGTACGGCGAGAGTAAAAGAATCGGCCCCCATGCTCTCCTGCTAATGCGCCAACGGTCGC            GGGTATTTTGCCTTGGAGCTATCCATTGAGGGTGCAGCACCCGCCGACGGCGACC            ACTCCGCGCCGGGCGCT</p>
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_078487
<b>Insert Size:</b>	3890 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>	<a href="#">NM_078487.2</a> , <a href="#">NP_511042.1</a>
<b>RefSeq Size:</b>	4001 bp
<b>RefSeq ORF:</b>	237 bp
<b>Locus ID:</b>	1030
<b>UniProt ID:</b>	<a href="#">P42772</a>
<b>Cytogenetics:</b>	9p21.3
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Cell cycle, Pathways in cancer, Small cell lung cancer, TGF-beta signaling pathway
<b>Gene Summary:</b>	<p>This gene lies adjacent to the tumor suppressor gene CDKN2A in a region that is frequently mutated and deleted in a wide variety of tumors. This gene encodes a cyclin-dependent kinase inhibitor, which forms a complex with CDK4 or CDK6, and prevents the activation of the CDK kinases, thus the encoded protein functions as a cell growth regulator that controls cell cycle G1 progression. The expression of this gene was found to be dramatically induced by TGF beta, which suggested its role in the TGF beta induced growth inhibition. Two alternatively spliced transcript variants of this gene, which encode distinct proteins, have been reported. [provided by RefSeq, Jul 2008]</p> <p>Transcript Variant: This variant (2) uses a different splice site, which leads to a translation frame shift, when compared to variant 1. The resulting protein (isoform 2) is shorter and has a distinct C-terminus when compared to isoform 1.</p>