

Product datasheet for **SC103532**

p35 (CDK5R1) (BC035448) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	p35 (CDK5R1) (BC035448) Human Untagged Clone
Tag:	Tag Free
Symbol:	p35
Synonyms:	CDK5P35; CDK5R; NCK5A; p23; p25; p35; p35nck5a
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >NCBI ORF sequence for BC035448, the custom clone sequence may differ by one or more nucleotides

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GCACCTGTCCCCACGGACCCCGTCTGGCTGCGCAGCGTGGACCGCTCGCTGCTTCTGCAGGGCTGG
CAGGACCAGGGCTTCATCACGCCGGCCAACTGGTCTTCTCTACATGCTCTGCAGGGATGTTATCTCCT
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AGTATGTGTGTTTATAATCTGACAAAGTCATGAAGCTCAGTTTGGCTGTAATTTAATCCCTTCCCTT
ATTTTTATTTATTTTGTACTGTCTGATTCAATAAATGCAGTACCATCCATAAAAAAAAAAAAAA
    
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5' Read Nucleotide Sequence:	>OriGene 5' read for BC035448 unedited GGTGCACCATTTTGTAAACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGCCGC CTGCACCCCGGGCCAGCCAGCTCTCGGGTTCAGACCGGGGGCTCCTCCTCAGTCAAGA AAGCCCTCACCTGCCGTACCTCCGCAGGGACGCCAAACGGGTATCGTCCAGGCCT CCACCACTGAGCTGCTTCGCTGCCTGGGTGAGTTTCTCTGCCCGGGTGTACCGCCTGA AGCACCTGTCCCCACGGACCCCGTCTGGCTGCGCAGCGTGGACCGCTCGCTGCTTC TGCAGGGCTGGCAGGACCAGGGCTTCATCACGCCGGCCAACGTGGTCTTCCTCTACATGC TCTGCAGGGATGTTATCTCCTCCGAGGTGGGCTCGGATCACGAGCTCCAGGCCGTCTGC TGACATGCCTGTACCTCTCCTACTCCTACATGGGCAACGAGATCTCTACCCGCTCAAGC CCTTCTGGTGGAGAGCTGCAAGGAGGCCTTTTGGGACCGTTGCCTCTGTCAATCAACC TCATGAGCTCAAAGATGCTGCAGATAAATGCCGACCCACACTACTTACACAGGTCTTCT CCGACCTGAAGAACGAGAGCGGCCAGGAGGACAAGAAGCGGCTCCTCCTANGCCTGGATC GGTGAAGCACTGTAGCCTGCGTCAAGGATTCAATGCATNTTTAAGAATNTATTA TTAAATCAGTTTTGTGTACAGTATGTGTCTAGCAAAGCCACCAAAGGCCTCACCTTNTCC ACAGTCTCCTCCGGGGTTTTTTTCATTCTGCCAAGAAGTCTGGGCACTTTTGAAGTCA CGAGCCTTGCACAAAACAGAAAGATGTATNCAGAAGCCACCAGGCCACTGACCTCCAC TTTGGGACTCAAAGACCTGACTGCC
Restriction Sites:	NotI-NotI
ACCN:	BC035448
Insert Size:	3800 bp
OTI Disclaimer:	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).
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:	BC035448.1
RefSeq Size:	3149 bp
RefSeq ORF:	3149 bp
Locus ID:	8851
Cytogenetics:	17q11.2
Protein Families:	Druggable Genome
Protein Pathways:	Alzheimer's disease

Gene Summary:

The protein encoded by this gene (p35) is a neuron-specific activator of cyclin-dependent kinase 5 (CDK5); the activation of CDK5 is required for proper development of the central nervous system. The p35 form of this protein is proteolytically cleaved by calpain, generating a p25 form. The cleavage of p35 into p25 results in relocalization of the protein from the cell periphery to nuclear and perinuclear regions. P25 deregulates CDK5 activity by prolonging its activation and changing its cellular location. The p25 form accumulates in the brain neurons of patients with Alzheimer's disease. This accumulation correlates with an increase in CDK5 kinase activity, and may lead to aberrantly phosphorylated forms of the microtubule-associated protein tau, which contributes to Alzheimer's disease. [provided by RefSeq, Jul 2008]