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Product datasheet for SC323424

CDKL5 (NM_003159) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CDKL5 (NM_003159) Human Untagged Clone
Tag:	Tag Free
Symbol:	CDKL5
Synonyms:	CFAP247; DEE2; EIEE2; ISSX; STK9
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

Fully Sequenced ORF:

>NCBI ORF sequence for NM_003159, the custom clone sequence may differ by one or more nucleotides

ATGAAGATTCCTAACATTGGTAATGTGATGAATAAATTTGAGATCCTTGGGGTTGTAGGTGAAGGAGCCT
ATGGAGTTGTACTTAAATGCAGACACAAGGAAACACATGAAATTGTGGCGATCAAGAAATTCAAGGACAG
TGAAGAAAATGAAGAAGTCAAAGAAACGACTTTACGAGAGCTTAAAATGCTTCGGACTCTCAAGCAGGAA
AACATTGTGGAGTTGAAGGAAGCATTTCGTCGGAGGGGAAAGTTGTACTTGGTGTTTGAGTATGTTGAAA
AAAATATGCTCGAATTGCTGGAAGAAATGCCAAATGGAGTTCCACCTGAGAAAGTAAAAAGCTACATCTA
TCAGCTAATCAAGGCTATTCACTGGTGCCATAAGAATGATATTGTCCATCGAGATATAAAACCAGAAAAT
CTCTTAATCAGCCACAATGATGTCCTAAAACTGTGTGACTTTGGTTTTGCTCGTAATCTGTCAGAAGGCA
ATAATGCTAATTACACAGAGTACGTTGCCACCAGATGGTATCGGTCCCCAGAACTCTTACTTGGCGCTCC
CTATGGAAAGTCCGTGGACATGTGGTCGGTGGGCTGTATTCTTGGGGAGCTTAGCGATGGACAGCCTTTA
TTTCCTGGAGAAAGTGAAATTGACCAACTTTTTACTATTCAGAAGGTGCTAGGACCACTTCCATCTGAGC
AGATGAAGCTTTTCTACAGTAATCCTCGCTTCCATGGGCTCCGGTTTCCAGCTGTTAACCATCCTCAGTC
CTTGGAAAGAAGATACCTTGGAATTTTGAATAGTGTTCTACTTGACCTAATGAAGAATTTACTGAAGTTG
GACCCAGCTGACAGATACTTGACAGAACAGTGTTTGAATCACCCTACATTTCAAACCCAGAGACTTCTGG
ATCGTTCTCCTTCAAGGTCAGCAAAAAGAAAACCTTACCATGTGGAAAGCAGCACATTGTCTAATAGAAA
CCAAGCCGGCAAAAGTACTGCTTTGCAGTCTCACCACAGATCTAACAGCAAGGACATCCAGAACCTGAGT
GTAGGCCTGCCCCGGGCTGACGAAGGTCTCCCTGCCAATGAAAGCTTCCTAAATGGAAACCTTGCTGGAG
CTAGTCTTAGTCCACTGCACACCAAAACCTACCAAGCAAGCAGCCAGCCTGGGTCTACCAGCAAAGATCT
CACCAACAACAACATACCACACCTTCTTAGCCCAAAAGAAGCCAAGTCAAAAACAGAGTTTGATTTTAAT
ATTGACCCAAAGCCTTCAGAAGGCCCAGGGACAAAGTACCTCAAGTCAAACAGCAGATCTCAGCAGAACC
GCCACTCATTCATGGAAAGCTCTCAAAGCAAAGCTGGGACACTGCAGCCCAATGAAAAGCAGAGTCGGCA
TAGCTATATTGACACAATTCCCCAGTCCTCTAGGAGTCCCTCCTACAGGACCAAGGCCAAAAGCCATGGG
GCACTGAGTGACTCCAAGTCTGTGAGCAACCTTTCTGAAGCCAGGGCCCAAATTGCGGAGCCCAGTACCA
GTAGGTACTTCCCATCTAGCTGCTTAGACTTGAATTCTCCCACCAGCCCAACCCCCACCAGACACAGTGA
CACGAGAACTTTGCTCAGCCCTTCTGGAAGAAATAACCGAAATGAGGGAACGCTGGACTCACGTCGAACC
ACAACCAGACATTCTAAGACGATGGAGGAATTGAAGCTGCCGGAGCACATGGACAGTAGCCATTCCCATT
CACTGTCTGCACCTCACGAATCTTTTTCTTATGGACTGGGCTACACCAGCCCCTTTTCTTCCCAGCAACG
TCCTCATAGGCATTCTATGTATGTGACCCGTGACAAAGTGAGAGCCAAGGGCTTGGATGGAAGCTTGAGC
ATAGGGCAAGGGATGGCAGCTAGAGCCAACAGCCTGCAACTCTTGTCACCCCAGCCTGGAGAACAGCTCC
CTCCAGAGATGACTGTGGCAAGATCTTCGGTCAAAGAGACCTCCAGAGAAGGCACCTCTTCCTTCCATAC
ACGCCAGAAGTCTGAGGGTGGAGTGTATCATGACCCACACTCTGATGATGGCACAGCCCCCAAAGAAAAT
AGACACCTATACAATGATCCTGTGCCAAGGAGAGTTGGTAGCTTTTACAGAGTGCCATCTCCACGTCCAG
ACAATTCTTTCCATGAAAATAATGTGTCAACTAGAGTTTCTTCTCTACCATCAGAGAGCAGTTCTGGAAC
CAACCACTCAAAAAGACAACCAGCATTCGATCCATGGAAAAGTCCTGAAAATATTAGTCATTCAGAGCAA
CTCAAGGAAAAAGAGAAGCAAGGATTTTTCAGGTCAATGAAAAAGAAAAAGAAGAAATCTCAAACAGTAC
CCAATTCCGACAGCCCTGATCTTCTGACGTTGCAGAAATCCATTCATTCTGCTAGCACTCCAAGCAGCAG
ACCAAAGGAGTGGCGCCCCGAGAAGATCTCAGATCTGCAGACCCAAAGCCAGCCATTAAAATCACTGCGC
AAGTTGTTACATCTCTCTTCGGCCTCAAATCACCCGGCTTCCTCAGATCCCCGCTTCCAGCCCTTAACAG
CTCAACAAACCAAAAATTCCTTCTCAGAAATTCGGATTCACCCCCTGAGCCAGGCCTCTGGCGGGAGCAG
CAACATCCGGCAGGAACCCGCACCGAAGGGCAGGCCAGCCCTCCAGCTGCCAGACGGTGGATGTGATGGC
AGAAGACAGAGACACCATTCTGGACCCCAAGATAGACGCTTCATGTTAAGGACGACAGAACAACAAGGAG
AATACTTCTGCTGTGGTGACCCAAAGAAGCCTCACACTCCGTGCGTCCCAAACCGAGCCCTTCATCGTCC
AATCTCCAGTCCTGCTCCCTATCCAGTACTCCAGGTCCGAGGCACTTCCATGTGCCCGACACTCCAGGTC
CGAGGCACTGATGCTTTCAGCTGCCCAACCCAGCAATCCGGGTTCTCTTTCTTCGTGAGACACGTTATGA
GGGAAGCCCTGATTCACAGGGCCCAGGTAAACCAAGCTGCGCTCCTGACATACCATGAGAATGCGGCACT
GACGGGCAAGTGA

5' Read Nucleotide Sequence:

>OriGene 5' read for mutant NM_003159 unedited
CCCGCCCGTATCAGCAATTGGGCGGTAGGCGCTGTACGGTGGGAGGCTCTATATAAGCAGAGCTCGTTTA
GTGAACCGTCAGAATCTTGTAATACGACTCACTATAGGGCGGCCGCGAATTCGGCACGAGGCGGCGACGG
CGTCCTCAGGAGCTGTGGGGTCCCCTGCTAGAAGTGGGGGACTCGGCGGGGGAGTCATTTAATACTTCAT
GATTAGAACAAATATGTGAAAGTTCCCACCAACCAGTGAGAATTTCTTCCTTCAGACGGTTTTGGATCTT
ACTGCACAGCTTTCTGAGAAGTTCTTTTGGTGCCATGTTTTGTGGGCTTGCATCAAAAGAAGGAGTTTGT
CTTTCATGAAGAATTCCTAAACAATTGGTAAATGTGGATTGAAATAAAATTTGAGAATCCTTGGGGGTGT
GTAGGTGGAAGAGACCCCTATGGGATTTGGTACTTAATGGGCAAACCCCAAGGGAACCAACATGGAAATT
GGGGGCAAATCATGAAAATTCAGGGCCGTGTGAAAAAAAATGAAAAAGTTCAAAAAAACAAACTTTCCAA
AGACCTAAAATGGCTTCGGAACTCTAACCCGGAAAAACCTTTGGGGGATTAAAAGGAACCCTTTTCCCCG
AGGGGAAAATTTTCCCTTGGGGTTTGAGAATTTTTAAAAAAAAATTCCCCAAATTTGGGGGAAAAATGCC
CAAGGGGTTTCCCCCCGGAAAAATTAAACGCCACTTTTTTCCTATATCGGGCGTTTTCTGGTGGCGGTAA
AAAAATATTTTCCCCCACAAAAATAAACCCAAAAATCCTATAACCCCCCAGAAGGGCCCAAACTGTGAGT
TTTGGTTTTTCGGATATCTCGAAAGACGCATAGCCGTTTTTACCACACGTGTCCCCCACATGGGGTGTTG
CCCCCAAACATCTTATGGCGCCTCTCAGAAAAACCCTGCAGACTGAGTCGGAGCCGCGTTCTGGGGCGTA
CACGCGCGAACATTTCTTCTGAGCAGAGAAGTAGACCCTCTCGTTATATAGAG

Kinase Domain Sequence:

>SC323424 kinase domain raw sequence. By performing BLASTX analysis with this sequence against NCBI refernce protein database, you can confirm the presence of the kinase-deficient mutation
CTCKMGCATGGGCGGTAGGCGTGTACGGTGGGAGGTCTATATAAGCAGAGCTCGTTTAGTGAACCGTCAG
AATTTTGTAATACGACTCACTATAGGGCGGCCGCGAATTCGGCACGAGGCGGCGACGGCGTCCTCAGGAG
CTGTGGGGTCCCCTGCTAGAAGTGGGGGACTCGGCGGGGGAGTCATTTAATACTTCATGATTAGAACAAA
TATGTGAAAGTTCCCACCAACCAGTGAGAATTTCTTCCTTCAGAC

Restriction Sites: Please inquire

ACCN: NM_003159

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).

OTI Annotation: This kinase-deficient mutant clone was generated by created by site-directed mutagenesis from the corresponding wild-type clone. See details in "Application of active and kinase-deficient kinome collection for identification of kinases regulating hedgehog signaling." Cell. 2008 May p536-548.

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.

RefSeq: NM_003159.1, NP_003150.1

RefSeq Size: 3434 bp

RefSeq ORF:	3093 bp
Locus ID:	6792
UniProt ID:	O76039
Cytogenetics:	Xp22.13
Domains:	pkinase, TyrKc, S_TKc
Protein Families:	Druggable Genome, Protein Kinase
Gene Summary:	This gene is a member of Ser/Thr protein kinase family and encodes a phosphorylated protein with protein kinase activity. Mutations in this gene have been associated with X-linked infantile spasm syndrome (ISSX), also known as X-linked West syndrome, and Rett syndrome (RTT). Alternate transcriptional splice variants have been characterized. [provided by RefSeq, Jul 2008] Transcript Variant: This variant (I) represents the longer transcript. Variants I and II encode the same protein.