
Genomic sequence of a 12S seed storage protein from oilseed rape (*Brassica napus* c.v. jet neuf)

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A clone containing the complete gene of the embryo-specific storage protein cruciferin, has been isolated from a Brassica napus library (EMBL3). The cloned gene, cruA, has three exons and includes 5' and 3' flanking regions. The nucleotide sequence of the coding region of cruA is identical to the cDNA used to screen the library (1). A TATA box, transcription start site, translation start, and polyadenylation signals are indicated, as well as four regions 5' to the TATA box which have homology to the promoter of napin, another embryo-specific gene of Brassica napus (2).

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TATTTAGCTCGGTGGGTAACGGACGGGTTTCAGTTCGGTTCGGTTCGGATTCGGGTTCCGGATTATATGGCCATAGCCATAATTCGAGTGTGACCGTTAATCCGTTATACAG.. 120
ATCTAATCAAAACATGTCTAGATCAAAATTTGCAATCTTATTGCATATTTTTGTCTAACAAATATTACTAGAAATCTTTGTTTATTACCAACATTAGTAAACTATATCTTAACCAAGT.. 240
TGCAGGACGAGTTCGGTTCAAACGTAATGCTATAGTGATGTTATGTAATTTGTATACCTGATCAAAATGTAAGAATAATACAAATTTATATATCTGCAACAAACATCAGTATATA.. 360
TATCAACAAGAAATATATATTTTTGCTATTACATAGCTTACTCAAAAGTTGATGTGTAAGACATCCAGTTCATAAGCCATGCAAAITGAGATGTCCAAACTCCCTTGTAAATATAT.. 480
GTTTTCTTACAATGTGAAGCCAAATTAATTTTCAGAAGAAGACATAAAGATAGCAACTCAAAATGAAGTGTAGATGTACATAGTGCATCTATACCTGGTCTTATCTCATTCAAIT.. 600
TATCTCAAAAAATTTATCAACATCTATACAAATAGTTCACTATAAATAGCTTCACTCAACTCAGCTGTAAAGCCAGAAAACCAACAACTAAGTAAAGAGAAAATTCGCTCGGCTC.. 720
TCATCTCTCTCTCTTTTCTTAGCACTTTGACTTTTCCATGGCTCTACAGCTCAACAGTTTCCAAAGGAGTGCAGCTAGACCAGCTCAATGCACCTGGAGCGGTCACAGCTACTT.. 840
AAGGCTGAGGCTGGTCCGATCGAGGTGTGGGACCAACCGCTCCTCAGCTACGTTGCTCTGGTGTCTCCTTTGTACGTTACATCGAGTCAAGGCTCTACTTGCCTCTTCTTT.. 960
AGCAGCGGAGGCTCTCCTCGTGGCTAAAGTACGTgaactgatgtttgactatataaggtatogagattcaaatctgtgatctttaaaggtcagctctttgagaaaagtgtgtag.. 1080
aegtatacactatacagctgctaaagtttgcataacattataaattttttgttaattataaacctaaatataatgctgatgttcacagactgcccactaaatTTTTTTTT.. 1200
ttggtttgacattatagGAGAAGTCTTATGGGGAGTGGTCTGTGGGCGAGACATTCAGGACTCATCAGTGTTCACCAAGGGTGTAGCCCTTCGGGAAGGTGAGGGC.. 1320
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CAGCTCGAGCCAAACAGGtatataaataaacaacaaacctcaaaagcaatcaaggccaatctccttttagcatattttaaattatatacacaataatgacaaatcaaaactaa.. 1680
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CTTTCAGATCCATGTTAGGACAGCGCAACACTTCAGAACCAGCAAGCAACCGTGGAAACATTAACCGATCCAAAGCCCATTCAGTGTCAATAGGCCCTTTGAGGAGTCAGAGAC.. 2280
CGCAGGAGGAAGTTAACGGTTTAAAGAGACCATATCGACGCGAGGTGCACGATAAACCCTGATGACCCATCTAATGCTGACGATACAAAGCCACAGCTCGGTACATCAGCACTCTGA.. 2400
ACAGCTATGATCTCCDCACTCCTCGTCTCTCGTCTCTCAGCCCTCCGTTGATCTATCCGTCAAAACGGATGGTGTTCACAGCTGGAACGCAACGCAACGCAAGCGGGTCTCTACGTA.. 2520
CAGACCGGGAAAGCCATGTGCAGTGGTTAACGACAAACCGTGACAGAGTGTTCGACGGACAGTCTCTCAAGGACAGCTACTTCCATACCAACAGGTTTCTCCGTTGGAACGGGCA.. 2640
CAAGCGAAGCTTCCGGTGGATCGAGTCAAGCAAAACGCAACCGCACAGATCAACACACTTCTGGACGAACCTCGTCTTGAGAGTTTACCATTAGAGGTCATATCCAATGGGTACC.. 2760
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AGTGAACCTCTACTGTAAGAGGAGTTAATAGTATAAAGAGAGTAATAATATGACGCAATGTGACTGGTTTGTAGAGGTTTAAAGATGTACTCCTTTCTCAATATAACT.. 3000
CTTTTCTCAAGGTTAGCTAGCTGGCTAATCTATCAACTTCATTTTTGCACTACGCTACACATAGCTATAGGAGTACGAGTATCT.....3113

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