





Sbjct 1189 CCCAAAAAGCTTCATCCTTGATAACGAGGTCCTCAAATATCCCTCCACCTCAAACCTTCTT 1130

Query 3680 GGGACAAAGTTCGTGGTATTTCTTAAACTGCTCTCTCGCCTCCTGTTCCGATCAAGCAA 3739  
 ||| ||||| | || | ||||| | ||||| ||| | |||||

Sbjct 1129 TGGAGAAAGTTCGCGATACTTGGCAAAGTCTCTTTGCCTCCTCGTTTCTATCAAGCAA 1070

Query 3740 GCTATAAATCACCCCTTGGCAAAAGTAAGGCCTGAAATCCTTGGGGTCCCTCCTGGCCAA 3799  
 || || |||| |||| |||| | ||||| ||||| || || ||||| || | |||

Sbjct 1069 ACTGTATATCATCCCTCTACAAAATAAGGCCTGAAATCTTTAGGATCCTCATTCGACAA 1010

Query 3800 TTCCTGATAACTCCTCAATGCCTCATCCACATTCTTCTGAAGATACTGAATCTGTGCCAT 3859  
 || ||||| || || |||| | |||| | || || |||| | || |||||

Sbjct 1009 CTCTTGATAACTCTCCAGCGCCTCCTCCACGTTCTTTGCAGAAACTGTATTTGAGCCAT 950

Query 3860 TATCAACCTTACGTGCGGAGCTTCTTTCACCTGTTTTCTCCTCTGCAAGTTTCAGGGC 3919  
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Sbjct 949 AATCAATCTCAGTCCCTCGTTCTTTCACCTTATCTCTCTCTGCAATATCTAAAGC 890

Query 3920 TTCTTGAAGCCGGTTAAGCACTGCTTACCTTCTCCACAGCGGTCCATAAGCAAGGCATT 3979  
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Sbjct 889 CTCTCGTAACCTCCTAATAACCGCGTCTCCTTCTCCACTGCGCTCCATTAATAGTGCATT 830

Query 3980 CTCGAATAGAGCTTCGAAAGAGAGAGGATTACAGCCAAAATAGCTTCAAAAACCTGCCG 4039  
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Sbjct 829 CTCGAACAATGCCTCAAAGACAAGGGATTACACAACGAGAATTCTTCAAACACATTGCG 770

Query 4040 AGCTTCATCAACTTTCCCATTTCATTCAATAATCTCGCCACGAGAAATTCATTCC--- 4096  
 ||| || | || | ||||| |||| | |||| | || |||||

Sbjct 769 AGCGTCTTGACCCGGCGCATTTCATTAGCAATCTTGCCATCAAAAACCTCCATTTCAGT 710

Query 4097 AACCTCCGATGGTTGAGCAGAAACCAAGCGTTCCAATATCTTCAAAGCTTCTCATCCTC 4156  
 ||||| ||||| |||| | || | || || || |||| | || || ||

Sbjct 709 AACCTCC---GGTTGCGCAGATACTAACTGCTTTAAAATATTTAAAGCCTCGTCGTCTTG 653

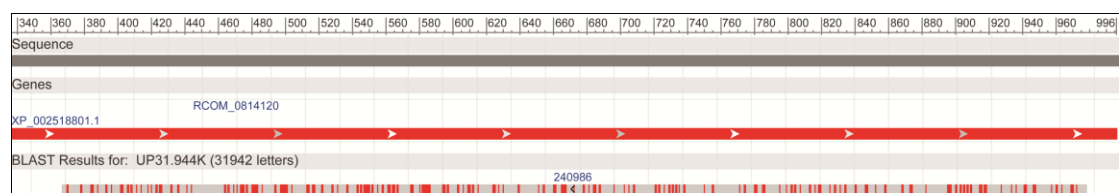
Query 4157 TCCATCTTCCAGCTTCCGTTGCAAGAGAGATTTCAGGCGTCAATGGCGTCAGAATGCGA 4216  
 || | || ||||| |||| | || |||| | | |||| | |||| | || ||

Sbjct 652 GCCCTTTTCAAGCTTCTGTTGTAAGAGTATTTAGAGACTCAATTGCTTCAGCATTAGA 593

Query 4217 TTCTAGAAA 4225  
 ||||| ||

Sbjct 592 TTCTAGGAA 584

(3) *Ricinus communis* conserved hypothetical protein, mRNA. Sequence ID: [ref|XM\\_002518755.1](https://www.ncbi.nlm.nih.gov/nuccore/002518755.1), (1e-90)



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Query 3621  CCAAACAGCTTCATCCTCGACAATGGAGTCTGCAAGAACCCTCCACCTCGAATTTCTTG 3680
        ||||| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
Sbjct 977   CCAAAAACTTTCATTCTTGATAATGGAGTCTCAAATACCCTTCTACCTCAAATTTCTTT 918

Query 3681  GGACAAAGTTCGTGGTATTTCTTAAACTGCTCTCTCGCCTCCTTGTTCGGATCAAGCAAG 3740
        | |||| | | | | | | || | | | | | | | | | | | | | | | | | | | | |
Sbjct 917   CGGGAAAGCTGGCGATACTTAGCAAAGTCTCTCTTGCCTCCTCATTCTATCAAGCAAA 858

Query 3741  CTATAAATCACCCCTTGGCAAAAGTAAGGCCTGAAATCCTTGGGGTCTCCTTGGCCAAT 3800
        ||||| |||| | |||| | |||| | | | | | | |||| | | | ||||| || | | | |
Sbjct 857   CTATATATCATTCTTGACAAAATATGGTCTAAAATCACTTGGATCCTCTTTTGACAGT 798

Query 3801  TCCTGATAACTCCTCAATGCCTCATCCACATTCTTCTGAAGATACTGAATCTGTGCCATT 3860
        || | ||||| || | |||| | | | | | | | | | | | | | | | | | | | | |
Sbjct 797   TCTTGATAACTTTTCAGGCCTCCTCTACATTCTTCTGAAGAACTGTATCTGTGCCATA 738

Query 3861  ATCAACCTTACGTCGCGAGCTTCTTTCACCTTGTTTTCTCCTCTGCAAGTTCAGGGCT 3920
        || | | | | || | | | | | | | | | | | | | | | | | | | | | | | | | |
Sbjct 737   ATAAGCTTCACATCTCTAGCTTCTTTCACCTTATTCTCCTCTTCTGCAATGTCTAGAGCC 678

Query 3921  TCTTGAAGCCGGTTAAGCACTGCTTTCACCTTCTCCACAGCGGTCATAAGCAAGGCATT 3980
        ||||| |||| | || |||| | | | | | | | | | | | | | | | | | | | | |
Sbjct 677   TCTTGTAGCTCCTAATAAAGTGCATCCCCTTCTCCACATCGGTCATTAGAAAGTGCATT 618

Query 3981  TCGAATAGAGCTTCGAAAGAGAGAGATTACAGCCAAAATAGCTTCAAAAACCTGCCGA 4040
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Sbjct 617   TCAAACAATGCCTCAAAGATAACGGATTCAATTTGAGAATTTCTTCAAACAAGTTACGT 558

Query 4041  GCTTCATCAACTTTCCCATTTTCATTCAATAATCTCGCCACGAGAAATTTCCATTCAACC 4100
        || || | | | |||| | |||| | | |||| | || | | | | | | | | | | | |
Sbjct 557   GCATCCTGTGTTCTACCATCTCATTAAACAATCTTGCCATCAAGAATTTCCACTCCGTA 498

Query 4101  TCCGATGGTTGAGCAGAAACCAAGCGTTCCAATATCTTCAAAGCTTCTCATCCTCTCCA 4160
        || ||||| || | | | | | | | | | | | | | | | | | | | | | | | | |
Sbjct 497   ACCAATGGTTGTGCCTCGACAAGATGGTTCAGTGTCTTCAAAGCTTCTCATCTTCCCA 438

Query 4161  TCTTCCAGCTTCCGTTGCAAGAGAGATTTCAAGCGTCAATGGCGTCAGAATGCGATTCT 4220

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Sbjct4150	CGCAGGTCTTCATCAGAGAGGATGCTAGTGGGGGCAGCTCCTCTGGAAAGGAGGGGTTTC	4209
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Query24457	CAAAGAAGGGTTGGTGGATCAAGATCTGCCATTAGTTCAGATCGTCATGGTGATCACCAT	24516
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Sbjct4314	-----TGACCTAGACAATCATGCTGAAGAGAGGATTATCGTGGTCCGCTCTCGAAGG	4365
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Sbjct4426	AAGCTTCCCAGGAGATCTTCTCC-----TGTCAATGGTAGTGACTTGCCTGTGAAAAG	4479
Query24694	GAAATGGACAGGGGAAGAAAAAGGGCAGGTTGTCACCAGGCAGAGCACCAGTATTGTCC	24753
Sbjct4480	GATATGGACAGGGGAAGGAACTGGGGCAGATTGTCACCTGGAAGGCAACAAATTCCTCC	4539
Query24754	TACCAGGGAAGGCACCAAAGCAGATTA AACCGCAAAGT----GAGGACTTAAACATGGA	24809
Sbjct4540	CAGCAGGGAAGGCTTCGAGACAGAATAAGA-GGAAGGGTTCAAGAGGATTCCATTACTGA	4598
Query24810	GGAGAGAAATTGCAGGGCTCCTCTTGTCAAAAGAGATGAGGTAGGGAACAGC-TTG-GA	24866
Sbjct4599	TGCAAGAAATCTTGGACCCAGCGCATCAGAAGGGATATAGTGGATGATGGCGTTGCTGA	4658
Query24867	TTTTGCTGGTCCAAAAAGCCTTGCAGAACTGAAAGGTGCTAAGGTTACAGAGAGCAAAGA	24926
Sbjct4659	TTTTGCTGGTCCAAAGAGCCTTGCAGAGCTGAAAGTTGTGAAGAATACGGAGAGCAAGG-	4717
Query24927	AGACCACCAGCAAGGCAAAGATTGTCAAGTATTTTCTGTTGGAGAGCAGAGAACTCTAA	24986
Sbjct4718	-----AGCAGCGAATGAAGGTTCAACAATCATTGTCCCTTGAAGGCAGAGAACTTAAA	4772
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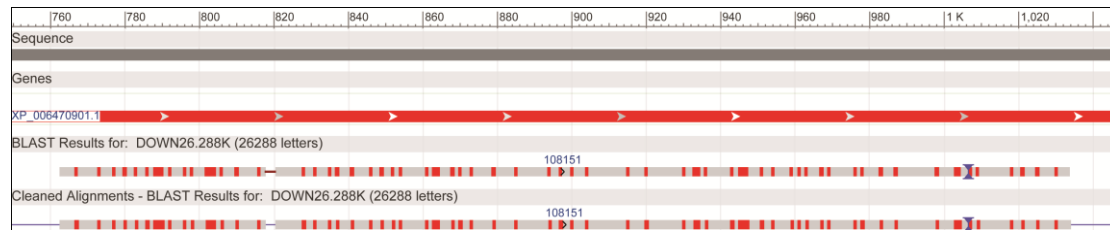
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Query25047  GCTAAGCATGATTTTGAAGAGGAAAAGAGTAGTAGAAAACCGCAGCTTCTGG  25097
      ||| ||  |||||  |||||  |||||  |  ||  |||||  |||||  |||||
Sbjct4827  TCTTAGTGTGATTCTGAAGAGAAAAGGGGAGCTGAAACAGCAGTTTCTGG  4877

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(2) PREDICTED: *Citrus sinensis* zinc finger CCCH domain-containing protein 17-like (LOC102617828), mRNA. Sequence ID: [ref|XM\\_006470838.1|](#) (1e-31)



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Query23983  CCTGGCATCATTGGA AATTCTTTAAGTAGGTCTCACCGTAGTCGTC AAGCTCAGG---TG  24039
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Sbjct763    CCTGTCATCAATGGTAACTCCTTGATCCGCTCTAATCGTTTGCATCAGGCTCATGCACTG  822

Query24040  GATGAGCAGAGTCTACAGAATGGCAAAGAGGGTGATGATTACTTGGGTGAATCCTCACCT  24099
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Sbjct823    GATGATCAAAGTTTCCAGCATGGTAAGGATGCTGATGAGTTTTTGAGGGAGTCCTCTCCT  882

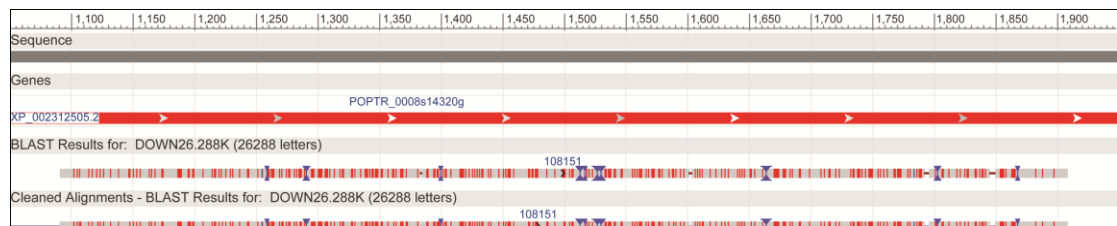
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Sbjct883    GGATTTGATGTTCTTGTTGATGATGAGCTCAGAGATTCTGATTATTATCATGATGAAGAT  942

Query24160  GATGTTGGAAGGACAACAAGTCATAATGGAAGGCATTTGACCTCTGTGAATGAATTTGAT  24219
      |  |||  ||  ||||  |  |||  |  |||||  |  ||||  ||  |||||  |||||  |||
Sbjct943    CAATATGGCAGAACAAGAGGGCATGAAGGAAGGGACTTGA ACTCAGTGAATGAATATGAT  1002

Query24220  TACGACA ACTGCTCTGTTAATCACAGTTCAATGA  24253
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Sbjct1003  ATCG---GCCGCTCTGTTGATTACACTTCATTGA  1033

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(3) *Populus trichocarpa* zinc finger family protein (POPTR\_0008s14320g) mRNA, complete cds. Sequence ID: [ref|XM\\_002312469.2|](#)



Query24055	CAGAATGGCAAAGAGGGT	GATGATTACTTGGGTGAATCCTCACCTGGC	TTGATGTACTC	24114
Sbjct1091	CAGAATGGCAAGGATGCTGATGAGTATTTGAGGGAGTCTCTCCTGGTTTTGATGTTCTT	1150		
Query24115	GTAGATAATGAGCTCAGTGATTATGATTATTACCAAAAGGAAGATGATGTTGGAAGGACA	24174		
Sbjct1151	GTGGACAATGAGTTGAGGGATTGAGTATTATTACCACGGTGAAGAGCAGCTTGGAAAGAACA	1210		
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Query24295	GACCCATATGGACGGTCTCACGATCATTATGCATGGCAACAGAGTAGAGCTTCATCTG--	24352		
Sbjct1325	GATTCTATGAACTCACGCCAGGGCAGCATGCTTGGGAGCAGCACAGGGCTTCATCAGAA	1384		
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Sbjct1443	CTGAGCACACTGAGGAATCAGATTTGCGTTATCGTTTATCGAAACAAGAGGGTTAATG	1502		
Query24473	GATCAAGATCTGCCATTAGTTCAGATCGTCATGGTGATCACCATTGGAGGGTTGATCATG	24532		
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Query24533	ACCACCATTGAGGATCAAAGAACTGAGTCAATCTTGGAGAGAGTCACGTCATTGTC	24592		
Sbjct1539	AGAACCATGTTGAGGAGCGAGGTTACCGGGTTCTTCACGAAGAGACTCTCATCACTTAC	1598		
Query24593	CT---CAAGCGGGTTCCATAAGCAATCGGCTGCGAGGTAGAGTTACGTTTCTGGTAGAT	24649		



Sbjct1599 CTTCACATGAGAGCTCCATTAGCAGTCGTCTTCGTGGTAGAATCAAGCTTCCAGGAAGAT 1658

Query24650 CTTCACCAGACAATAACAATACCAATGGCATGCATCCAGAGCGGGAAATGGACAGGGGAA 24709  
 ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||

Sbjct1659 CTCCA-----AACAATGGTGGTGTGTGCGTGCAGAAAGGGAAATTGACAGGGGCA 1709

Query24710 GAAAAAGGGGCAGGTTGTCACCAGGCAGAGCACCAGTATTGTCCTACCAGGGAAGGCACC 24769  
 ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| ||||| |||||

Sbjct1710 GGAATCGGGGAAGATTGTCACCGGTGAGGTCCCCGGTCACCTCCCAACAAGGGAGGCTAC 1769

Query24770 AAAGCAGATTAACGCAAAAGT----GAGGACTTAAACATGGAGGAGAGAAATTGCAGG 24825  
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Sbjct1770 GGGACAGAATGAAA-GCTAGGGTGGAAAGAGGATT---ACAATGAGGGGAGAAGTTTCAGA 1825

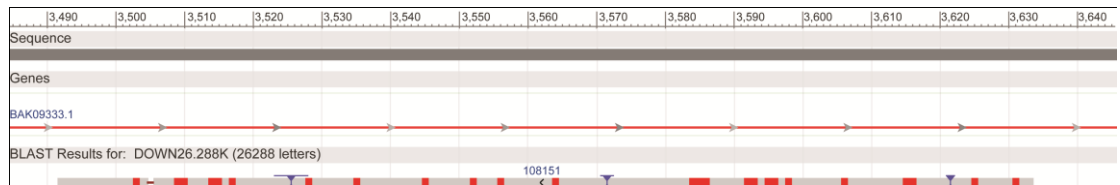
Query24826 GCTCCTCTGTCAAAAGAG-----ATGAGGTAGGGAACAGCTTGGATTTGCTGGTCCAA 24880  
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Sbjct1826 GGTCTCAAGTGAGAGGAGAATTAATGGATGATGGAAGTACT--GATTTGCTGGTCTTA 1883

Query24881 AAAGCCTTGCAGAACTGAAAGGTG 24904  
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Sbjct1884 AAAGTCTTGCAGAGCTGAAAGGTG 1907

(4) *Nelumbo nucifera* itself *GWD* gene for alpha-glucan water dikinase, partial cds. Sequence ID: [dbj|AB548406.1](http://dbj|AB548406.1) (e-value, 5e-18)



Query13585 TTTGGGTTGGACTCCGTCCAAATCAAAATCAATTTGGACAGACTGGATAGACCAATAAGA 13644  
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Sbjct3633 TTAGGGTTTGAC-CCGTCTGAATCAAAACCAATTTGAATGGGTTGGATGATCCAATAAGA 3575

Query13645 CATATTGAATTGGACCAGTCTAGACTTAATGATCTAAAGTATTTATTGGATCGGACTGGA 13704  
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Sbjct3574 CAT--TGAATTGAACCAGTCCAGATTTAATGGTCTAAAGTACTTATTGTAT-----TGGA 3522

Query13705 CCTGATTCATCCATAA-GAATTTATATTGG 13733  
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Sbjct3521 CCTGGTCTATCTTTAACGGATTTATATTGG 3492