Mutant *pydZU5-2*has a deletion of 5 nucleotides in *pyd* exon-20, inducing a frame-shift that affects predicted isoforms Pyd-PA and Pyd-PO, generating truncated proteins. *pyd9* contains an insertion of 2 nucleotides in exon 12 that introduces a frame shift and a premature stop codon, that affects isoform Pyd-PB and predicted isoforms Pyd-PO, Pyd-PF, Pyd-PI and Pyd-PJ. *pydCC6* contains an indel in exon 5 that causes a premature stop codon in Pyd-PP and predicted isoform Pyd-PO. Finally, *pydS10* has a deletion of 10 nucleotides in exon 3 that introduces a premature stop codon affecting isoforms Pyd-PK and Pyd-PJ. The sequences of the relevant exons with the changes introduced in the different mutants are shown below. The regions encompassing these changes are marked.

>Exon\_20\_Pyd\_ZU5-2

CGAAATGGAGCCGTACGATGAGCGCTACGATGATTACTATAACATGCCACCCCCTGCCGCCCATCCGTCCCAAGGGCATCATATGCAGCGATCCCGATCAGCTCCTCGTTATCCACACGAGCGACCTCCTCACGCCCAAGATCCGAACTACTACGGCCACTATGGAACGTCCAGGGGACATAGTCAGCCGCGCCAGCAATATTCGCAGCATCACCAACAGCAGTATTACGATGATCATGGGTTGGAGATGGGTCCACCGCCATTGCCGCCACATAAGAAGAAGAAATCGGTGCTAAAGAGCCCACTGGTGGCATTAAAGAATGCACTGCTTAAGAGTACGAGGCCTCTAAGGAGAATGAACAGCATGGTGGAACCGGAGAGGAAACCGAAGGGACTTCGACGCCAGCAATCGATGCTGGAGAGGGGTGTGCAAAGACCCTACTACCCGGATGAGTATCCAACGTATCCAGCTGGCTTTGAGGAGCGTGCCCATGGTGGACAAGGCATGATGCAACCACATTCACAAGATGCCTACTATCAAAGGGGTGGTCACTACGCGCCGCAACAGCAGGAGATGATGAACAGCACCTATCAGAATCTGGAGGGTGAGGATATCTATGGGAATATCGGCAACACAGTTCCCAGAATGCCGCATCACCAGGACAATGGTTACGGATATGACCAATATGATCTCTATGCGAATCGAGCGTGCATCGATCTCGAAAGAAGGCAAGCAGAGGCAGCTGCAGCTTCTGGCGGACGAAATGGAAGGAGAATTGTAAGGCGGCACAGCACCACTACTGCAGATCGTGGAGGAAATCCCGGACCGCCAAGGAGGCCTATGATCAGTCCTGGTTATGAACAAGATCCGCAAGAGATCTACCAGACCCGCAACGGAGCCTACATGCTGCCCGATCAGCGAAGGGCGCCCAGTTCGGAGGTGATGACCCGTAGACGA**TC**CGGGGGCTGCCAATGAGCAGACTGAGGAGGAACCGCTCTACCAATCACGACGCGAAATGCAGCGCGAAATGCAGAGAAATCATCTGTACCAATCGAAACGAGAAATGCAGGAGAGGATTAGCCAGGGCAAGAGGGATATGGAGCGAGAATTTAGCCCCCAAAGCAGCAGCAGCCAGTCGGAAGCCTCCAATTCGGAGGCAATATACCAGAGTCGGCGGGAGGCCAAGGAAAGTGCTCTGAAAACGAGGTCACAACTGAGGGATCAGATCTATCAGACTAGACGGGAAGCCCTGGACAGCATGGCTGAACCGATCTATGTATCCAAAAGAGGTATGGGCAGACCGGCCCCAATCTATGAGACCCGGGAAGAGAGTATCCTCCAGTCCCGAGAAAATGAAACAGATGAAAAGAAGGAAAAGGAGTGCAAAACCGAGCAGATTCAGGTGGAGATTAATGCTCAACCGGAAGAACAGATCGAAGATTCGACCTTAAGTCGTTCGGACCTGCAGAAATCTTCGGACACGGTGATAGAAAATCCAGCTAGAGCTCCTCTTGTGCAGGACGAAGTAGATGATGACGAAGAGGAGGAGGTTCAGGATCAGCGTGATCCCGCTGAGAGCTCTGCGGATCAGACAGAGCAGCCAACAGCTATTGAAAATAATCTGCACAATGAAGGAATGGTGGAGCAATCACAGAATGATTCGGATGACGTATTCGAAGCAGCAGATAAGGTTTCTCCCCTGGCCCCTCCACCAGCTCCTGTTCAACCGCCGACCCCGCGATCCGGTAGAGCTCCCTTCCACATTTCGAATATCCTTAAGCGAACAGCACCTCCGCCGAGTTCCCCAATCGGTGACAGCTGTACCTCCATCGAAACCCAGTACACATCACAAGCCAGCTTGCCAGTGGGTCCACCCAATGCGACCAGTACGCCGTTTAGTAGCAGCATGTCATTGCCCATCGCCGGACCAGTAAATAATCAACCTTCGGCCAACGGACGCTTTCCCACTCTGCCCCGTGAACCCAGCACCTCGCGCGGATTTTTTGACTCCAACGGTGGCACTTTGGCGGATAAGCTGTGGCACGTCTCACTGCAAATCCCGCCGGGAGCCATTCCGGCCGGAGTACGACAAGAGATCTACTTCACCGTGAGCGACCCGCGAATGGGACAAGCTGTCGGCGGTCCTCCGCTGGACATGGAAAATG

>Exon\_12\_Pyd\_-9

CCAGTAGAATCCCTCTCCGACGATTTCCTATTCCCCATGACCACAT**GA**CCCGACTCTCGTATGCATCAAGTCCCGAATCCGATTTGGAACTGAGTCCCGGCCCATCCGCATCATTGTCGCTTGGCAATTTGCCGCAGTTGGTTAAAGCGAGCTCAGATCCATCGATTGCCACTAATCAGGATAACTTGGATAGGGATAGAGACATAATTGGTGAAGGACTACCACCTCCATATACG

>Exon\_5\_Pyd\_CC-6

CGACCGTGACAGGACTCGAACCTGCAATCTTCGGATCCGAAGTCCGACGCCTTATCCATTAGGCCACACGGTCGCTTGTTCCAAGCACGCTTAAACTCGAAAACATTTGATACGTGTGCAAGCAACCTACAGCACAAGGGTGGATTTTCTGTAGAGCAAACATTCTGTTATCGCGGGGTGCAAATACAAACGAACAAAAACGAAAATTAAATACAACAAAAATATGAAGCCCAGCACGCGACGTCGCAGTTTCAAAACGAAACCCCCCAAATCGAATGTATATAACCCACTCGTTCGCTATCGCCCGACAGCCTATGTCCGAAATGGAATTATTGGCGGCGCCGAGGGTCCCGGCTCGAGTGGAGTGTACCAAAT**AGGATAG**GGATAGGGTCTATACCACCAGCAAGATGTTTCTACGCGATGGCTATATGTACCCGCGTCAACCGGGTCAGACCATGGATCCCCGTTTCCCCCTCGAGTTGCACGAATTCCCTCAGCAATTCGGCGCCACTGGCCTGCAGTTGGTTAGTGCACCCAAGGTTCATATAGCCGGCGAATATCTGGCCAGTGAACAACAGCAGCAGCAGCAACAACAGCAGCAGCAGCATCAACAGGTGCAGGAGCAACAACAATTGGGCAGAAGAAAGGCTGCGGCAGCCGCCGAAATAAATTTGGCAAATCAGGTTTACTGGCTGGGCAAGCAAAAGACCAGATCCCGATCGCGTAGCAATAGTGTGGGCAATCGGAGCATAACCAGCTGCATGGGCGGCGGTGGAGGGGGTGGCGAAAAGGAAAGGGAACGCGGCGGGGATCGAGATCGCCCCTATATACGCAACGTTGACGATCTTCTCCAGGCACTGGGCAAAAGGGATGGGGGGGATAACAACAGCAATCTGCTCGAAACTGCATCGACGCACTCCTCATCGCAGCGAAGGCGCTTCAAGAAG

>Exon\_3\_Pyd\_S-10

GGAAAAGGAAAACGATCGCAATCGTCGCGCTGTTAGTTATGGCGGTGACGCCACCTCCTCCCCCCATTCGGCCACCATACCCCGCGCCGCCCCCCGTCGGGTGGCCTTGATGAAGGATCCACCGCCACCGCCGCCACCCAAGCCGCAATTGGGTTCCAAAGCGGATTCTGTATCGCATTTGGCCAGCAAATATCCCCAATCCGAGTACAATCTCATACAGAAAATCGACTCGAACAGCACACTCACTGCTCCGGCGCAATATCAACCGCAGAATTTCTACGCTAATACTGGCACCATATCC**TC**TACGGATCGCTGTTATGTCACGCCAGTTCGACGACCAGTCCGCTGGCGGTCCGGAAGAGGGACAAACTGCTTCATCGCTTCAGCGATGCCGCCACCTTGGGCCGGAAGCTCAAGAAGAAGAAGAACACGAATCGCACCTGCAGATCCATGACGGAGGCCATTGAGATGCTGGCCGATCCCGTCATCGAAGATGAATTCTTT

WT GGTGATGACCCGTAGACGATTCTATCCGGGGGCTGCCAATGAGCAGA

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*pydZU5-2* GGTGATGACCCGTAGACGAT-----CCGGGGGCTGCCAATGAGCAGA

WT GGTGATGACCCGTAGACGATTCTATCCGGGGGCTGCCAATGAGCAGA

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*pydZU5-2*  GGTGATGACCCGTAGACGAT CCGGGGGCTGCCAATGAGCAGA

WT CGATTTCCTATTCCCCATGACCACAT--CCCGACTCTCGT

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*pyd-9* CGATTTCCTATTCCCCATGACCACATGACCCGACTCTCGT

WT CGATTTCCTATTCCCCATGACCACAT CCCGACTCTCGT

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*pyd-9* CGATTTCCTATTCCCCATGACCACATGACCCGACTCTCGT

WT CGAGTGGAGTGTACCAAATCGC----GGATAGGGTCTATACCACCAG

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*pydCC6*  CGAGTGGAGTGTACCAAATAGGATAGGGATAGGGTCTATACCACCAG

WT CGAGTGGAGTGTACCAAATCGC GGATAGGGTCTATACCACCA

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*pydCC6*  CGAGTGGAGTGTACCAAATAGGATAGGGATAGGGTCTATACCACCA

WT CGCTAATACTGGCACCATATCCTCTACGAATGGCTACGGATCGCTG

 ||||||||||||||||||||||||          ||||||||||||

pydS-10 CGCTAATACTGGCACCATATCCTC----------TACGGATCGCTG

WT CGCTAATACTGGCACCATATCCTCTACGAATGGCTACGGATCGCTG

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*pydS-10* CGCTAATACTGGCACCATATCCTC TACGGATCGCTG