



Examination of TPD52 Family with respect to its Evolutionary History and Domains



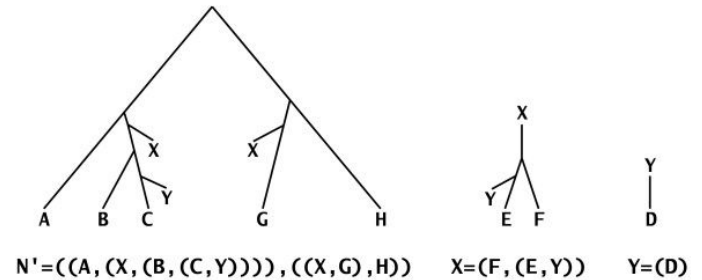
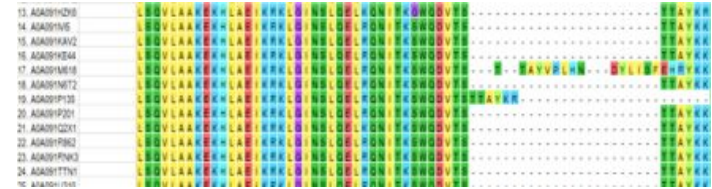
INTRODUCTION

- Protein family and D52 protein
- Domains
- Conservation scores
- Phylogenetic tree
 - Homology

- PFAM
- InterPro
- EggNOG
- MEGA7
- Conservation values of each position of consensus sequence



- MEGA7 alignment
- Phylogenetic tree in Newick format
- Figtree



- CDART
- SMART and EggNOG



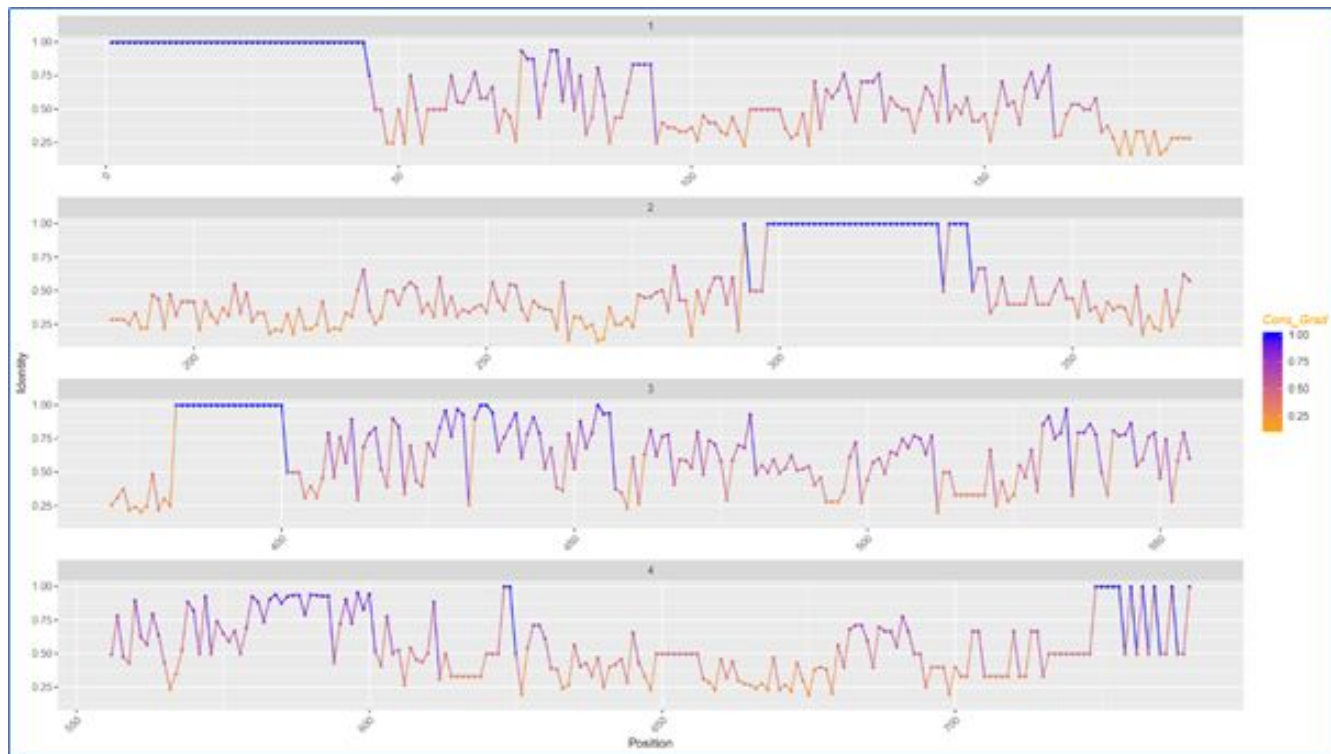
RESULTS

- TPD52 protein on 8th chromosome
- High level expression in liver, kidney, colon tissues vs low level expression in heart, lung and skeletal muscle
- Calcium signalling
- B cell maturation
- Cell proliferation -> D52 proteins with D52-like proteins

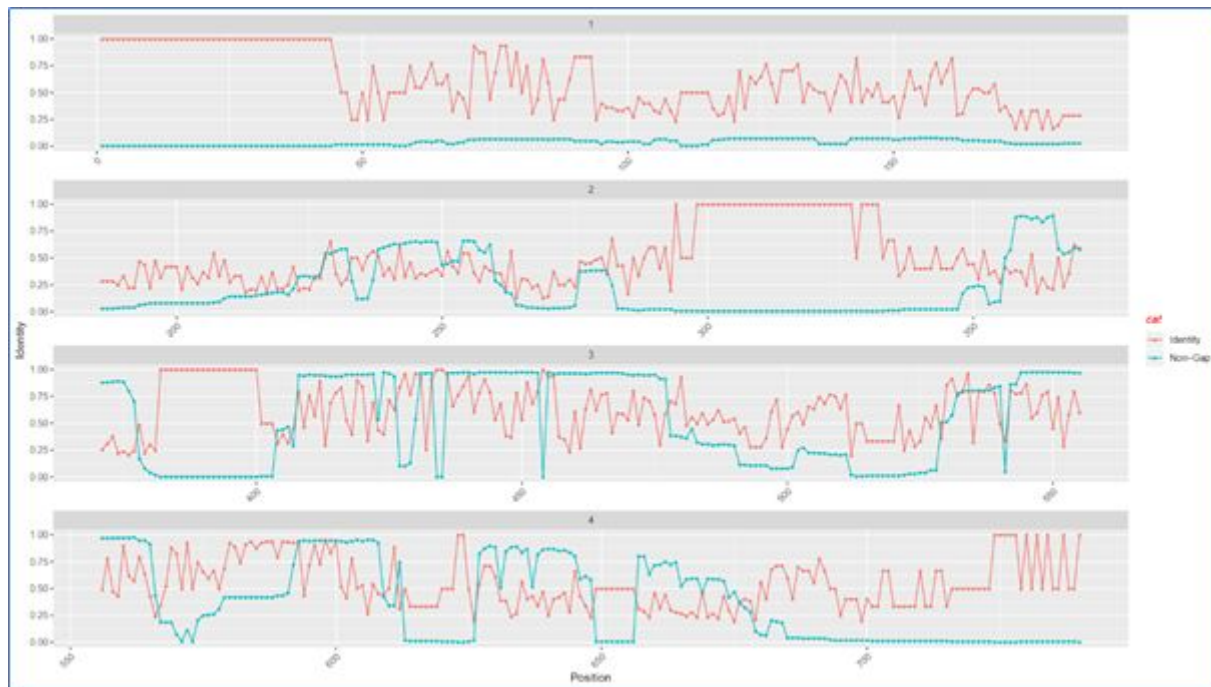
RESULTS

| Protein Sequences | | Group Name |
|-------------------------------|--|------------|
| Species/Abbrv | | |
| 71. 59463.ENSMLUP00000000474 | RRCGLRRK-LGPSASEGLRGLRSLRWRDGVSSA | |
| 72. 59463.ENSMLUP00000011436 | RHCAELRRK-LGLTALYGLKQNLKLSWRREVQVSNAYW | |
| 73. 59463.ENSMLUP00000013829 | KHLAEIKRK-LGISLDELGRQNIAGWQDVAT | |
| 74. 59463.ENSMLUP00000014239 | RHLVEIKRK-LGMNLMNELKNFQKSWHDQIT | |
| 75. 59729.ENSGLUP00000007353 | RHCELEIKRK-LGLTFLGLKQNLKLSWHDQVSNAYYKTEKLGEV | |
| 76. 59729.ENSGLUP00000012000 | KHLAEIKRK-LGISLDELGRQNIAGWQDVAT | |
| 77. 59729.ENSGLUP00000012165 | KHLVVEIKRK-LGISLDELGRQNIAGWQDVAT | |
| 78. 6183.3mp_065470_3_mRNA | RRLLEIKKA-LFTPLSLTLGLYGLMLGCHLKEV | |
| 79. 6183.3mp_081380_mRNA | RRCGLFRRK-LGITPLEELKSEVKQGLDLRLSDAYLKTEAVYK | |
| 80. 61853.ENSLEP00000002842 | KHLAEIKRK-LGISLDELGRQNIAGWQDVAT | |
| 81. 61853.ENSLEP00000012143 | RHCELEIKRK-LGLTFLGLKQNLKLSWHDQVSNAYYKTEKLGEV | |
| 82. 61853.ENSLEP00000016937 | RHLVEIKRK-LGMNLMNELKNFQKSWHDQIT | |
| 83. 6238.CBG04517 | KHADELKRR-LGLTFLTEELGLRLSKLVY | |
| 84. 6239.F1368.11 | KHADELKRR-LGLTFLTEELGLRLSKLVY | |
| 85. 6334.EFV5051 | KHADELKRR-LGLTFLTEELGLRLSKLVY | |
| 86. 6669.DappuP52875 | RKSSLEKRR-LGITAVEFENQDGLRLNKKET | |
| 87. 69293.ENSAGCAP00000004501 | KLLADIKRK-LGITPLNELKNFQKTEWQEVTS | |
| 88. 69293.ENSAGCAP00000013666 | RHADELKRR-LGLNPLNELRQNFQKSWQDVQSNAYYR | |
| 89. 69293.ENSAGCAP00000017521 | KHADLRK-LGATSLDLNRNLRQWHDQVTS | |
| 90. 6945.ISCWO06441-PA | YRSQELKRR-LGITVVKELKDDMEQIKNIQDS | |
| 91. 7029.ACPY005467-PA | KASQELKRR-LGYTVVKELKDDMEQIKNIQDS | |
| 92. 7070.TD131379-PA | RHSDELKRR-LGITVVKELKDDMEQIKNIQDS | |
| 93. 7091.BGBMCA003519-TA | RHSDELKRR-LGITVVKELKDDMEQIKNIQDS | |
| 94. 7159.4HEL007173-PA | RHSDELKRR-LGITVVKELKDDMEQIKNIQDS | |
| 95. 7165.AQAP004869-PA | RHSDELKRR-LGITVVKELKDDMEQIKNIQDS | |
| 96. 7165.AQAP004869-PA | RHSDELKRR-LGITVVKELKDDMEQIKNIQDS | |
| 97. 7170.CPUJ013850-PA | RHSDELKRR-LGITVVKELKDDMEQIKNIQDS | |
| 98. 7170.CPUJ013851-PA | RHSDELKRR-LGITVVKELKDDMEQIKNIQDS | |
| 99. 7217.FBpp0115369 | RHSDELKRR-LGITVVKELKDDMEQIKNIQDS | |
| 100. 7222.FBpp0155579 | RHSDELKRR-LGITVVKELKDDMEQIKNIQDS | |
| 101. 7227.FBpp0287592 | RHSDELKRR-LGITVVKELKDDMEQIKNIQDS | |
| 102. 7237.FBpp0278200 | RHSDELKRR-LGITVVKELKDDMEQIKNIQDS | |
| 103. 7244.FBpp0234313 | RHSDELKRR-LGITVVKELKDDMEQIKNIQDS | |
| 104. 7245.FBpp0256979 | RHSDELKRR-LGITVVKELKDDMEQIKNIQDS | |
| 105. 7260.FBpp0252137 | RHSDELKRR-LGITVVKELKDDMEQIKNIQDS | |
| 106. 7425.NV10932-PA | RHADELKRR-LGISVVKELKDDMEQIKNIQDS | |
| 107. 7460.GB13891-PA | RHSDELKRR-LGITVVKELKDDMEQIKNIQDS | |
| 108. 7668.SPU_013450r | MRAKEIKRK-LGITGVAVLKSDVRAWNTKSSAYYTEKIKSGV | |
| 109. 7718.ENSCHP00000036303 | REAEIKRKL-LGLTFLTEELGLRLSKLVY | |
| 110. 7757.ENSHPM00000010402 | KHLAEIKRK-LGISLDELGRQNIAGWQDVAT | |
| 111. 7897.ENSLEP0000001286 | KHADELKRR-LGLTFLTEELGLRLSKLVY | |
| 112. 7897.ENSLEP00000016476 | KHVDELKRR-LGITPLNELKNFQKSWHDQIT | |
| 113. 7897.ENSLEP00000022481 | RHLLEIKRK-LGITPLNELKNFQKSWHDQIT | |
| 114. 7955.ENSADRP000000052401 | KRHLLEIKRK-LGITPLNELKNFQKSWHDQIT | |
| 115. 7955.ENSADRP000000115511 | RHADELKRR-LGLTFLTEELGLRLSKLVY | |
| 116. 7955.ENSADRP000000119359 | RHADELKRR-LGLTFLTEELGLRLSKLVY | |
| 117. 7964.FNSDARP000000126181 | KVALEIKRK-LGITPLNELKNFQKSWHDQIT | |

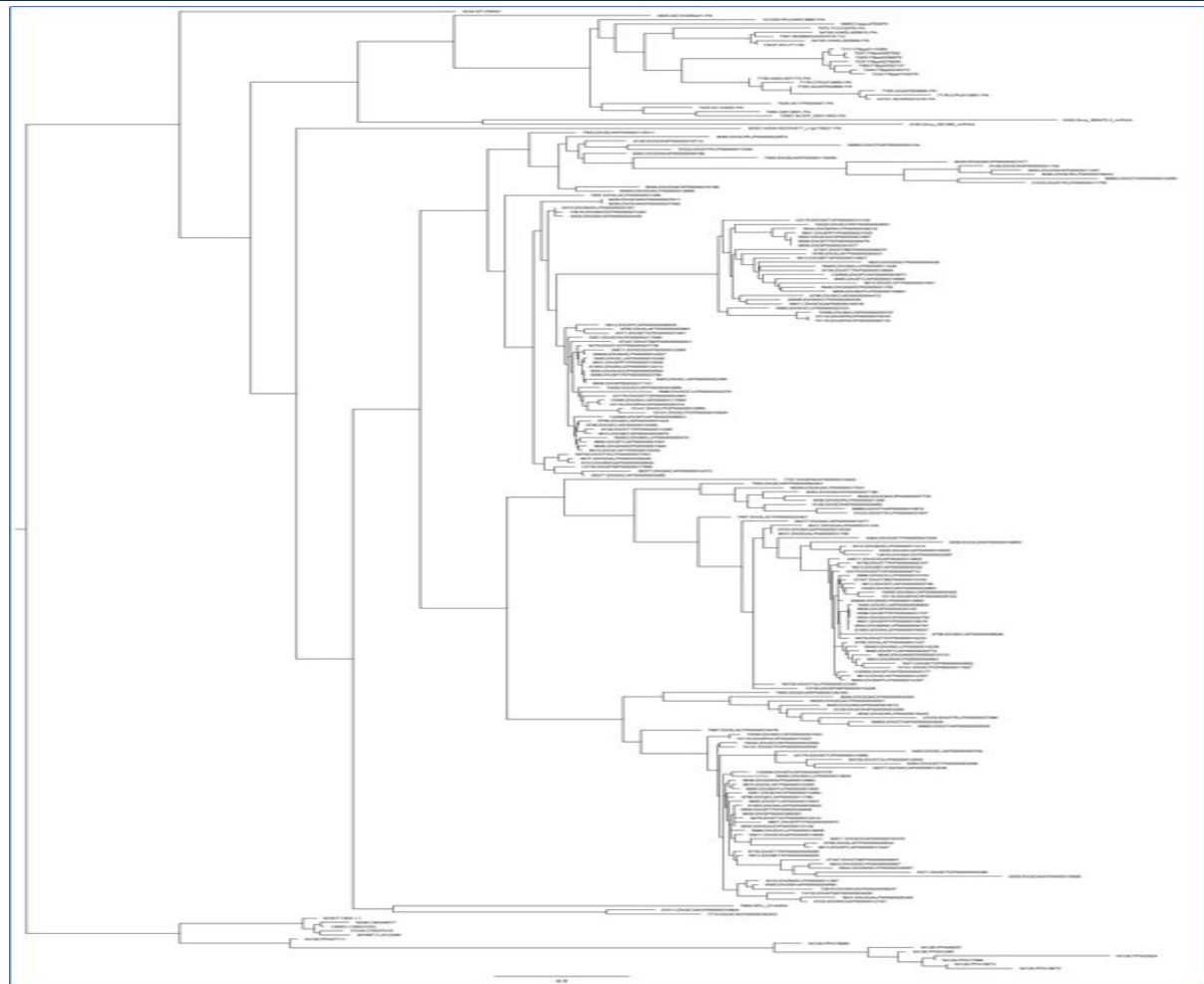
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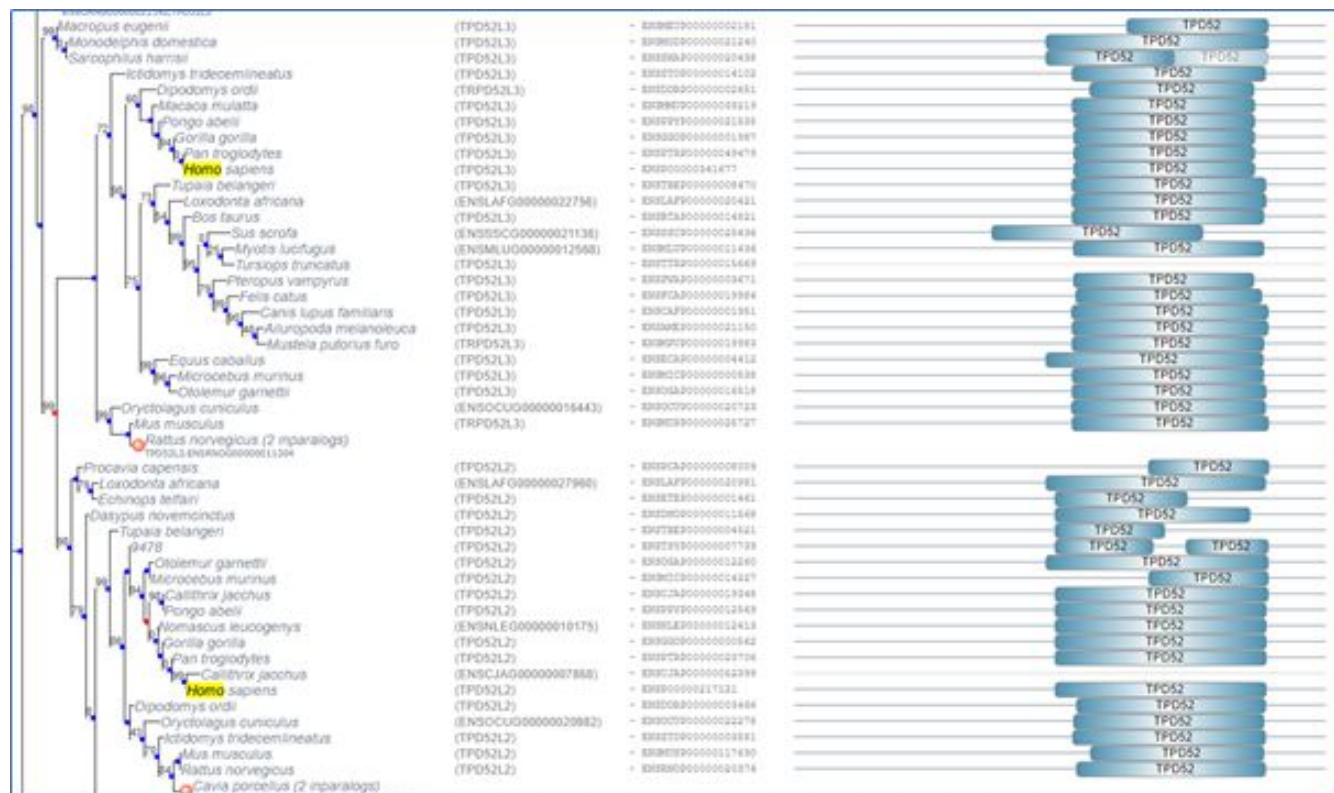
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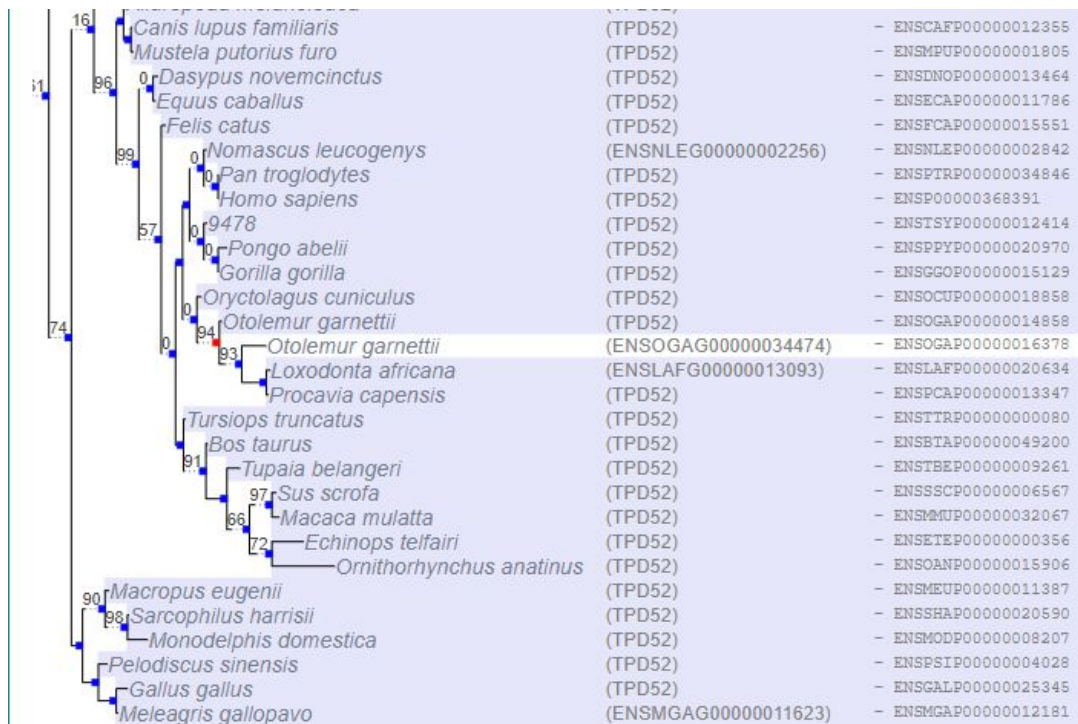
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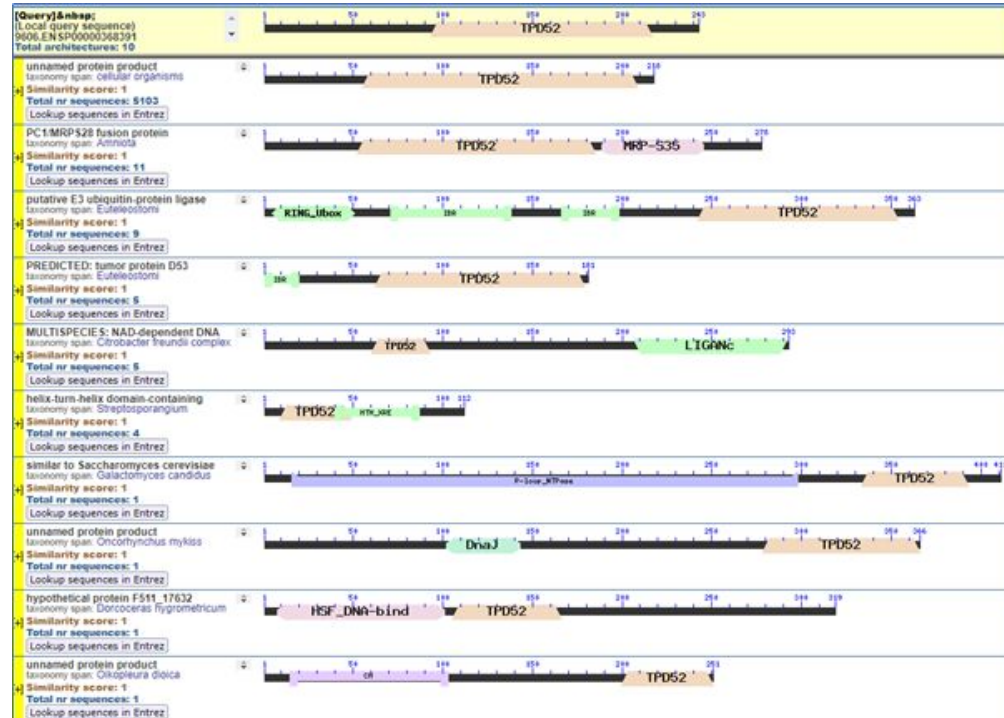
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