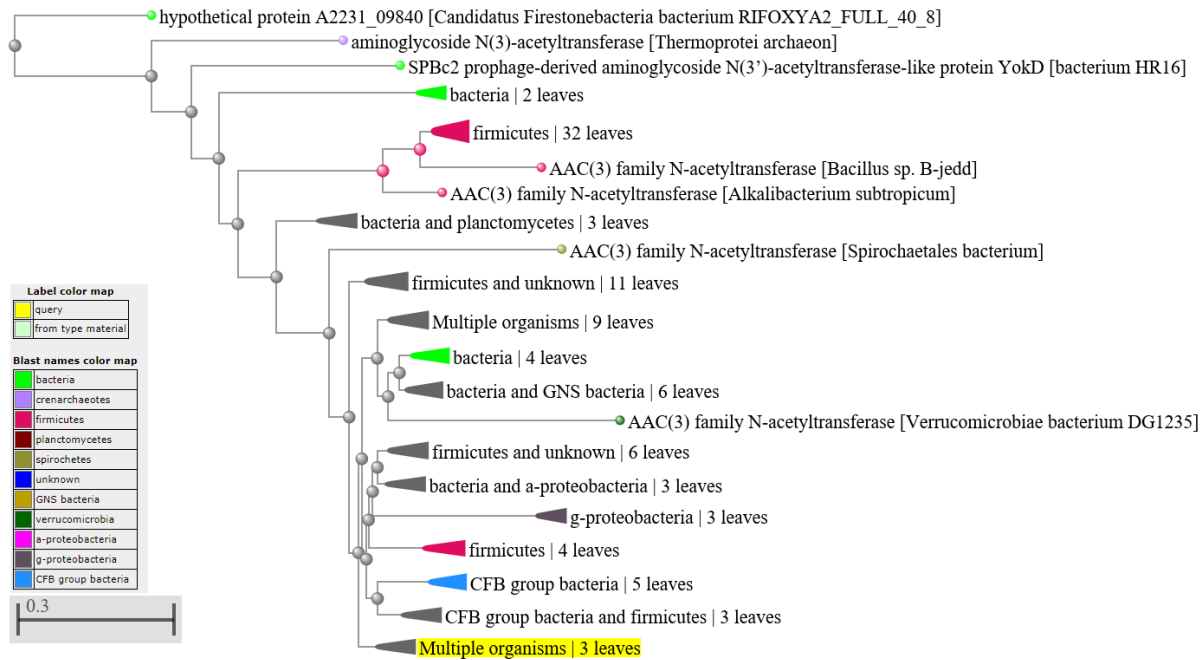


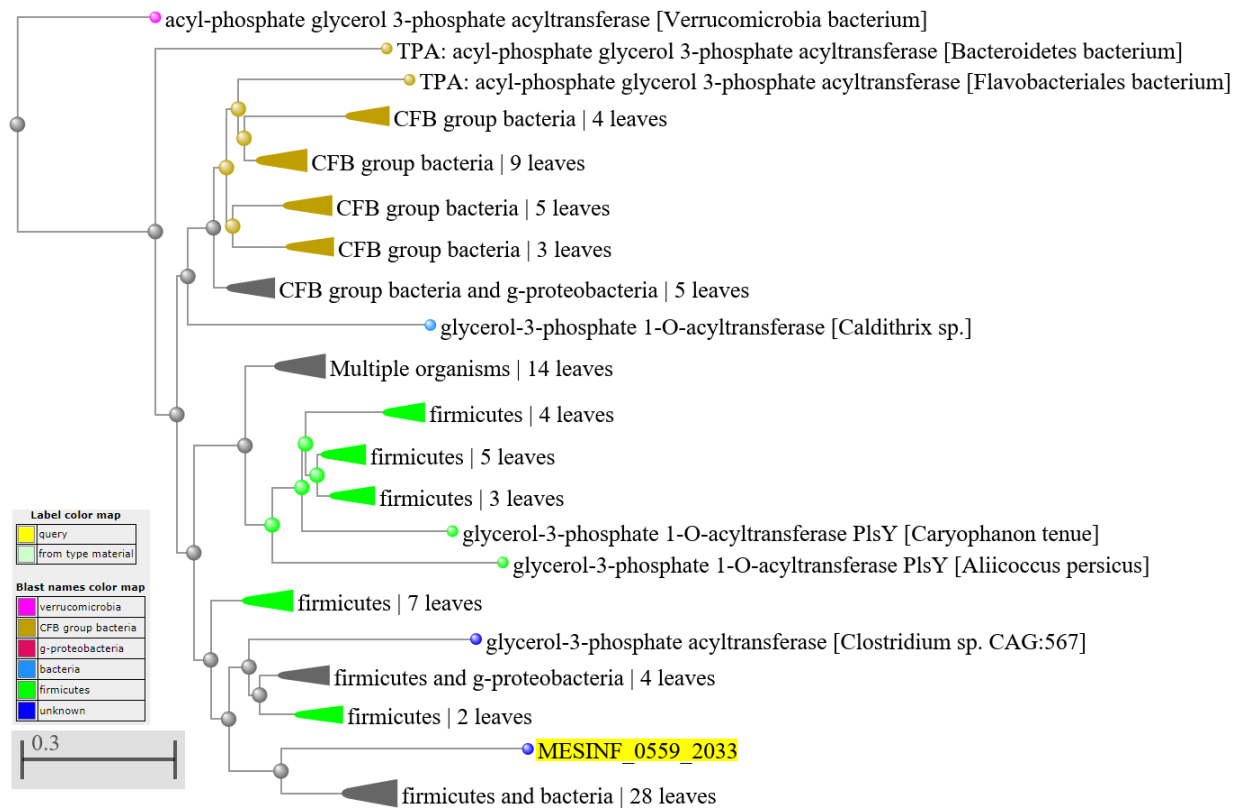
Supplementary File1: List of likely Functional inference from dendrograms of putative horizontally-transferred genes in M. infera with unknown functions.

Genes are mostly transferases, Transposase, Hydrolytic enzymes and ABC transporter. The function for six genes is still unknown.

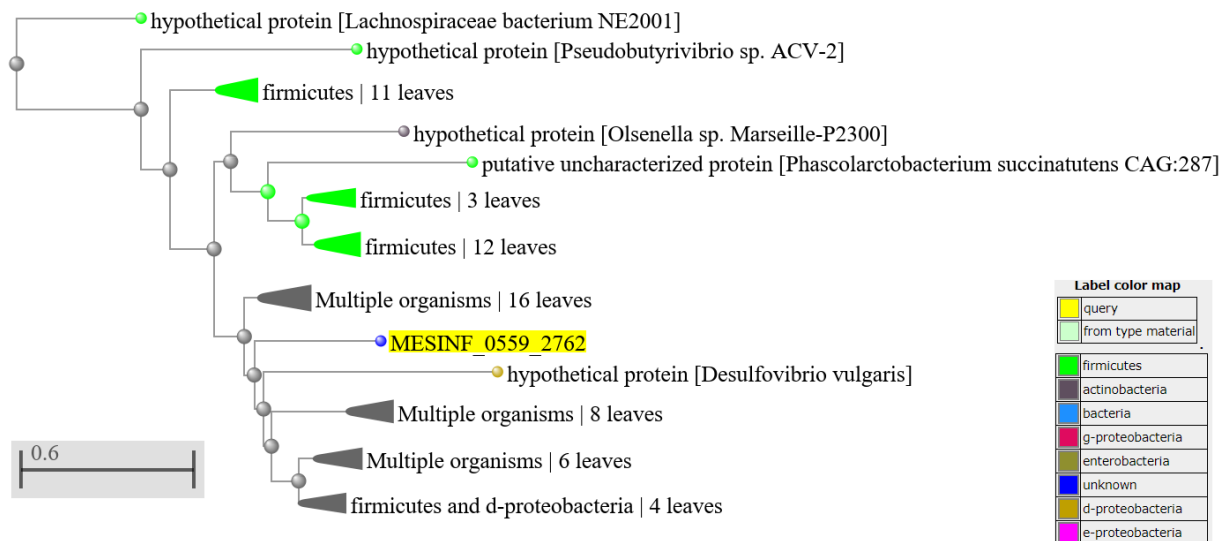
1- MESINF_0559_1071: AAC(3)-I family aminoglycoside 3-N-acetyltransferase



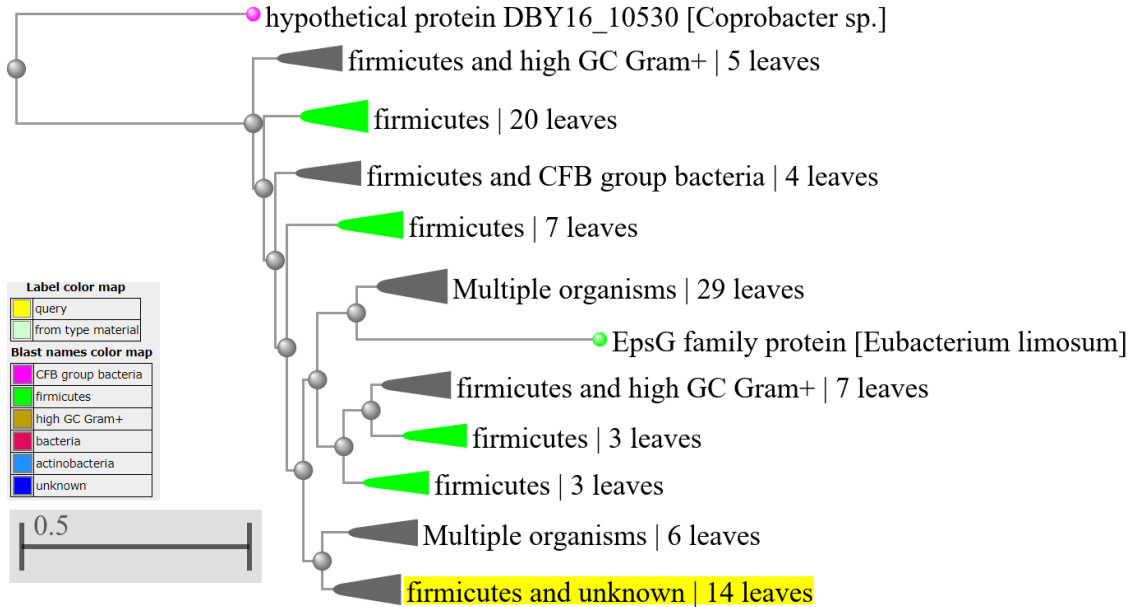
2- MESINF_0559_2033: Acyl-phosphate glycerol 3-phosphate acyltransferase



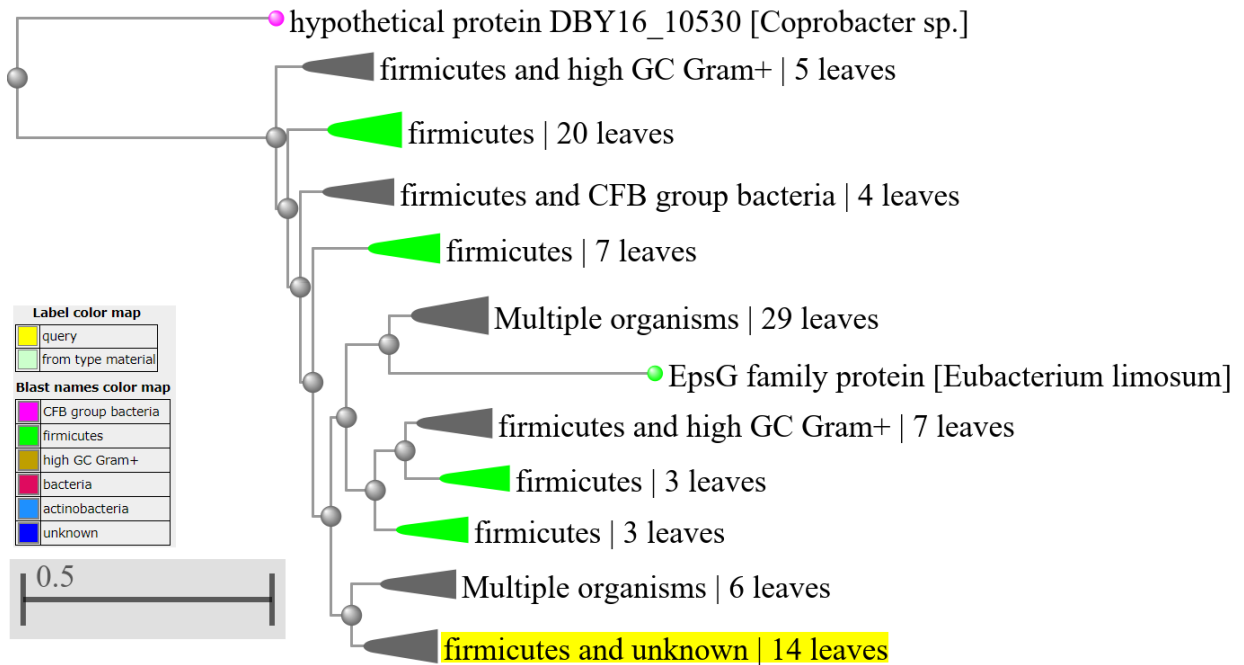
3- MESINF_0559_2762: class I SAM-dependent methyltransferase



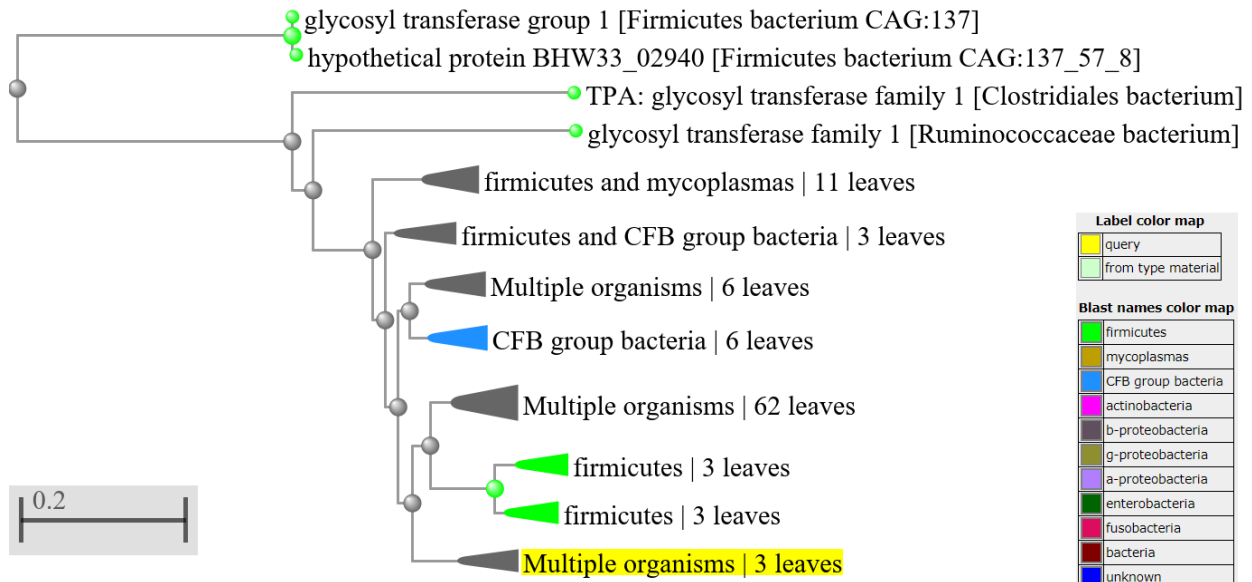
4- MESINF_0559_0681: EpsG family protein



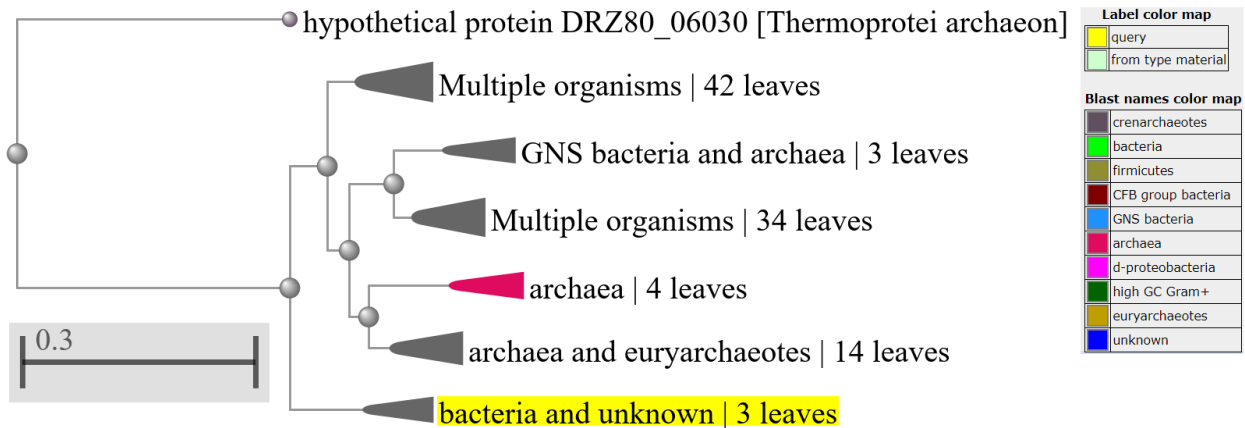
5- MESINF_0559_2738: FAD:protein FMN transferase



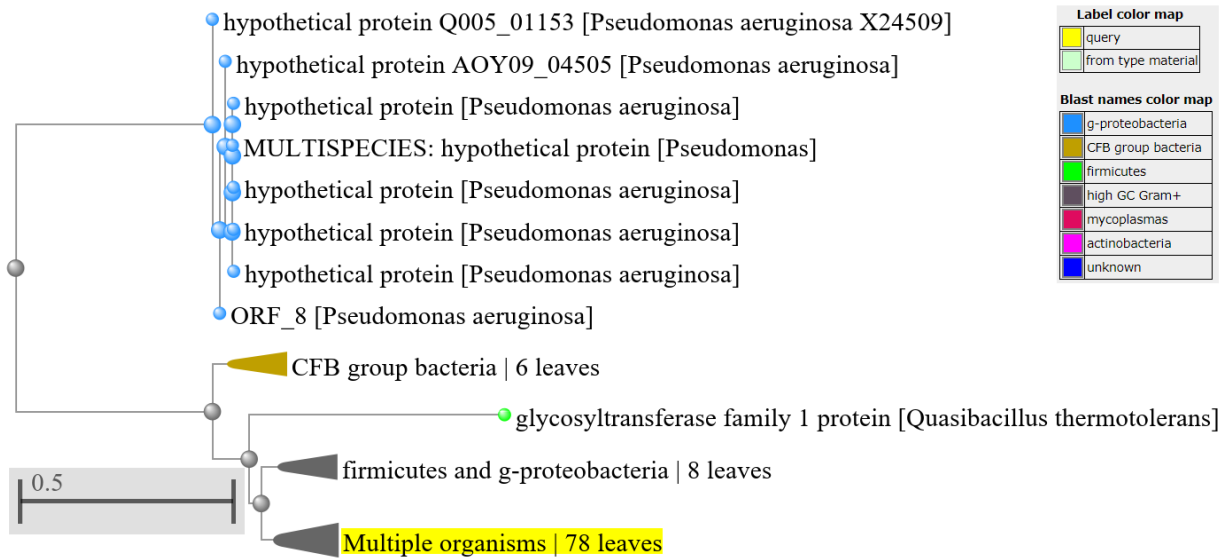
6- MESINF_0559_0682: glycosyl transferases



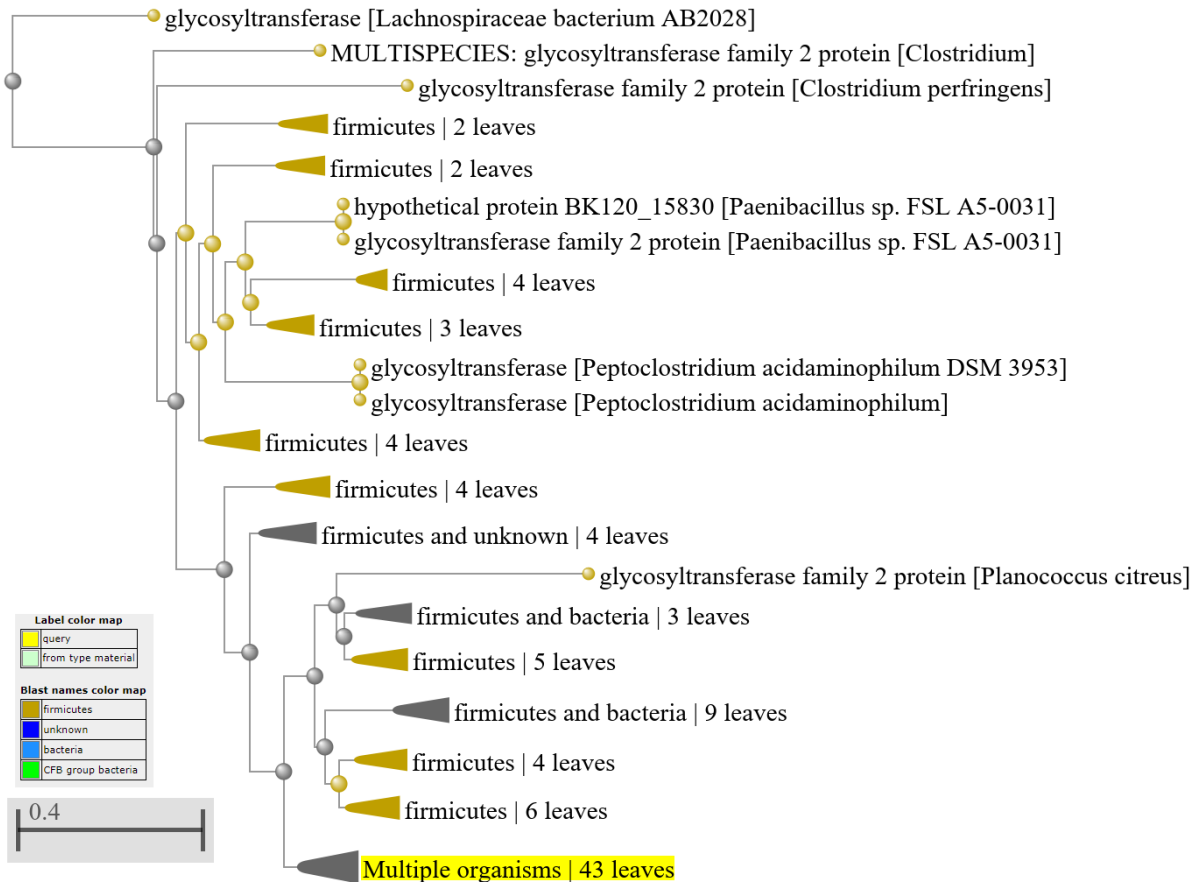
7- MESINF_0559_1105: glycosyl transferases



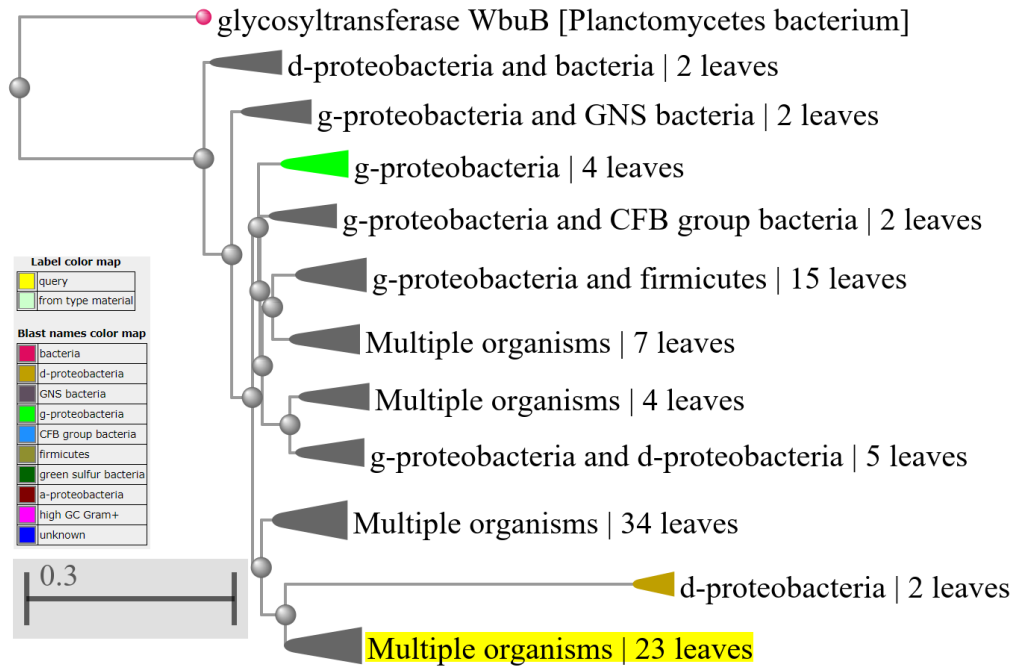
8- MESINF_0559_0680: glycosyl transferases



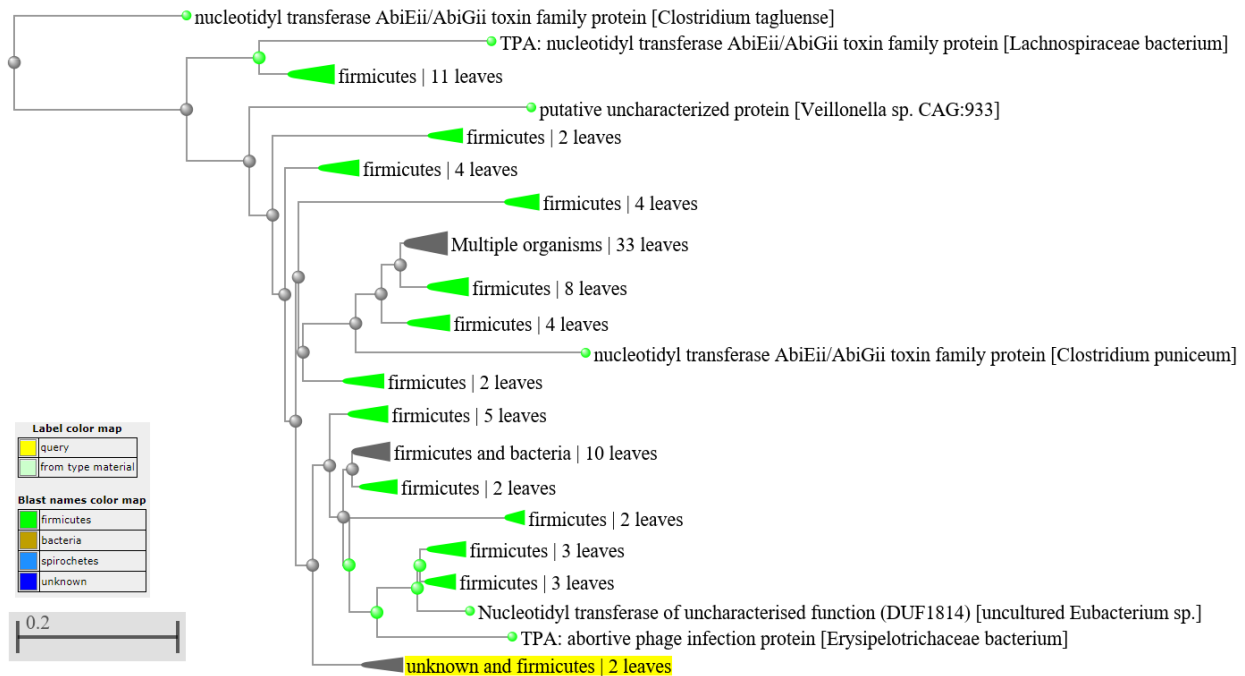
9- MESINF_0559_0679: glycosyl transferases



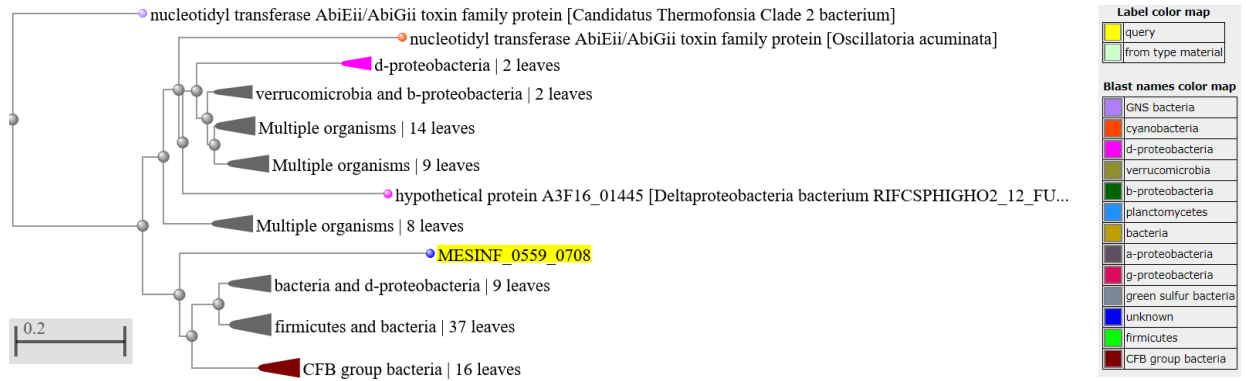
10- MESINF_0559_0675: glycosyl transferases



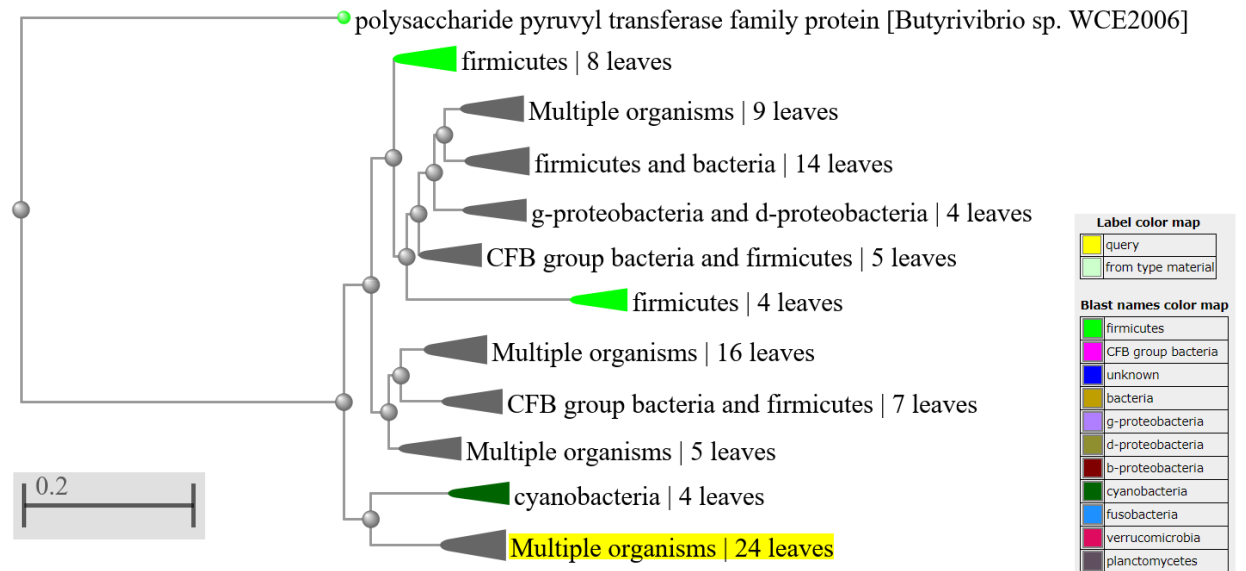
11- MESINF_0559_0668: Nucleotidyl transferase AbiEii/AbiGii toxin family protein



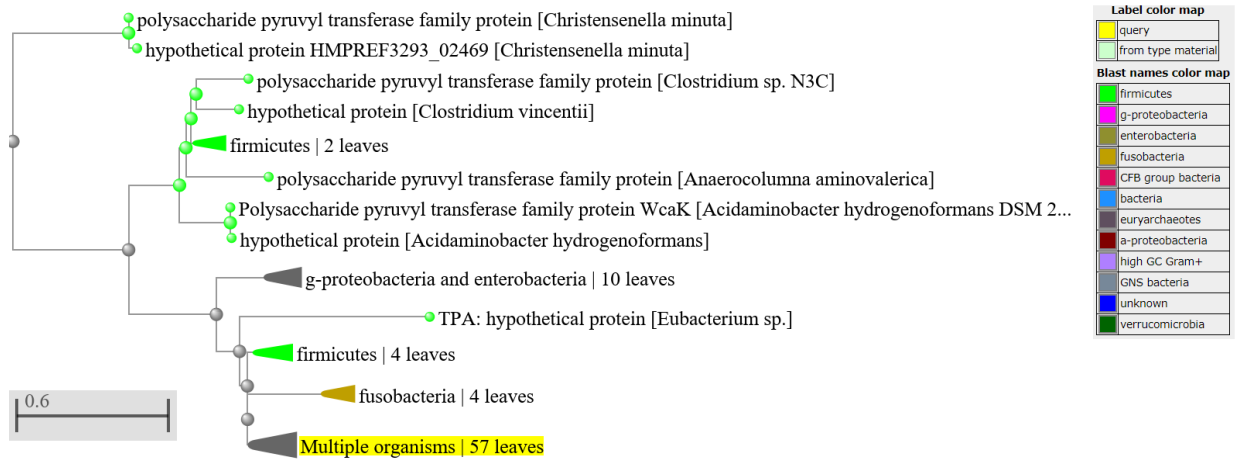
12- MESINF_0559_0708: Nucleotidyl transferase AbiEii/AbiGii toxin family protein



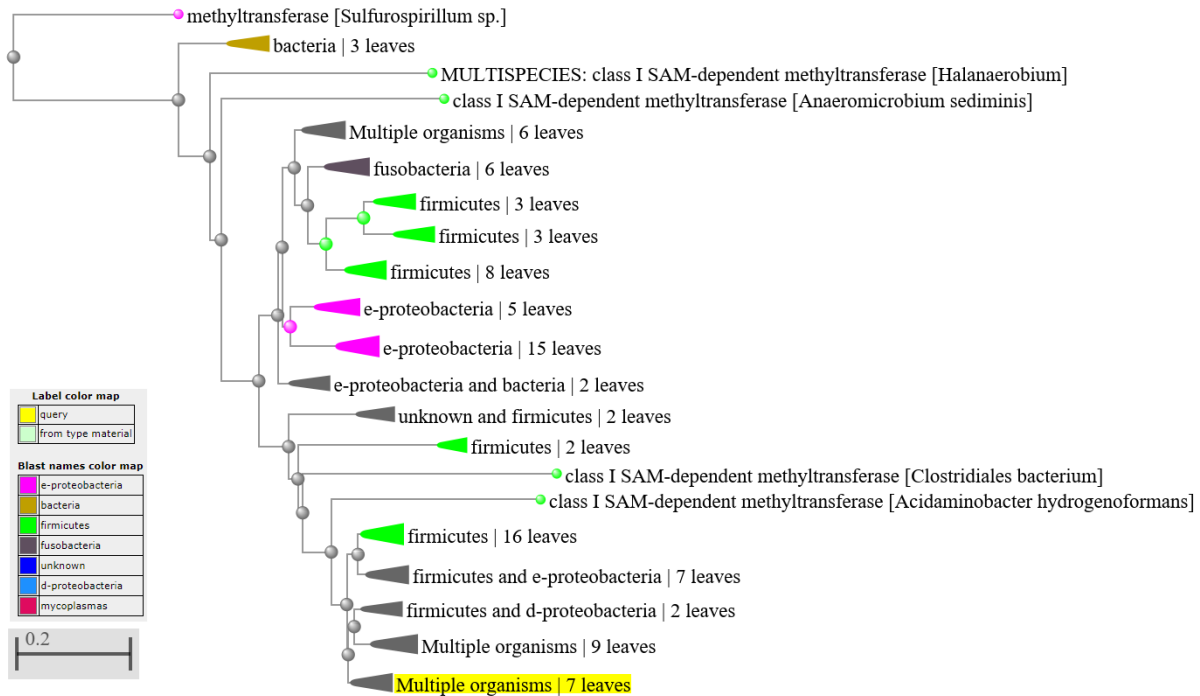
13- MESINF_0559_0683: Polysaccharide pyruvyl transferase



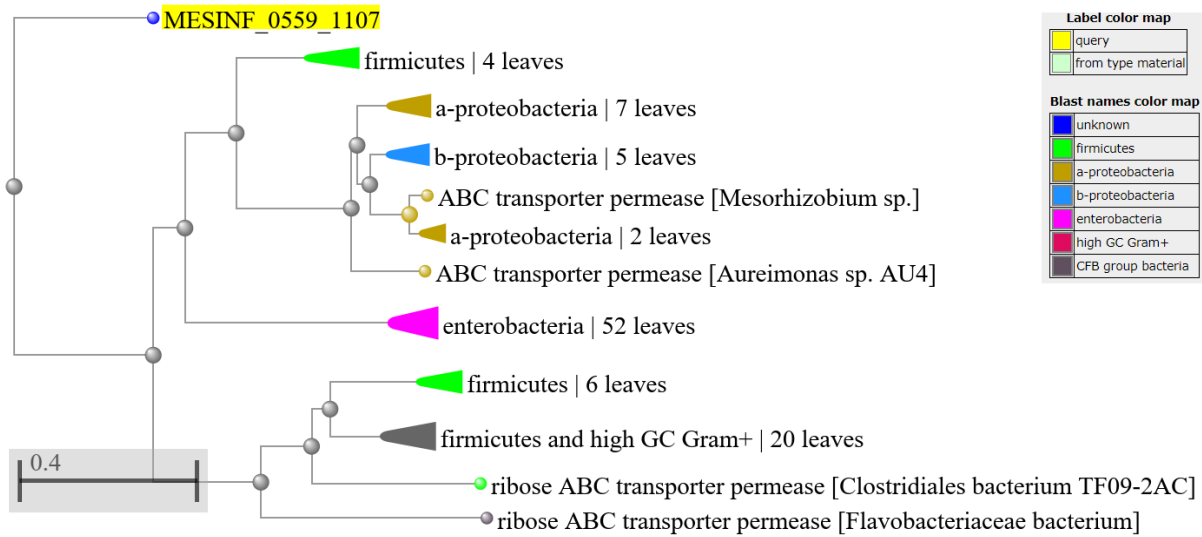
14- MESINF_0559_2232: Polysaccharide pyruvyl transferase



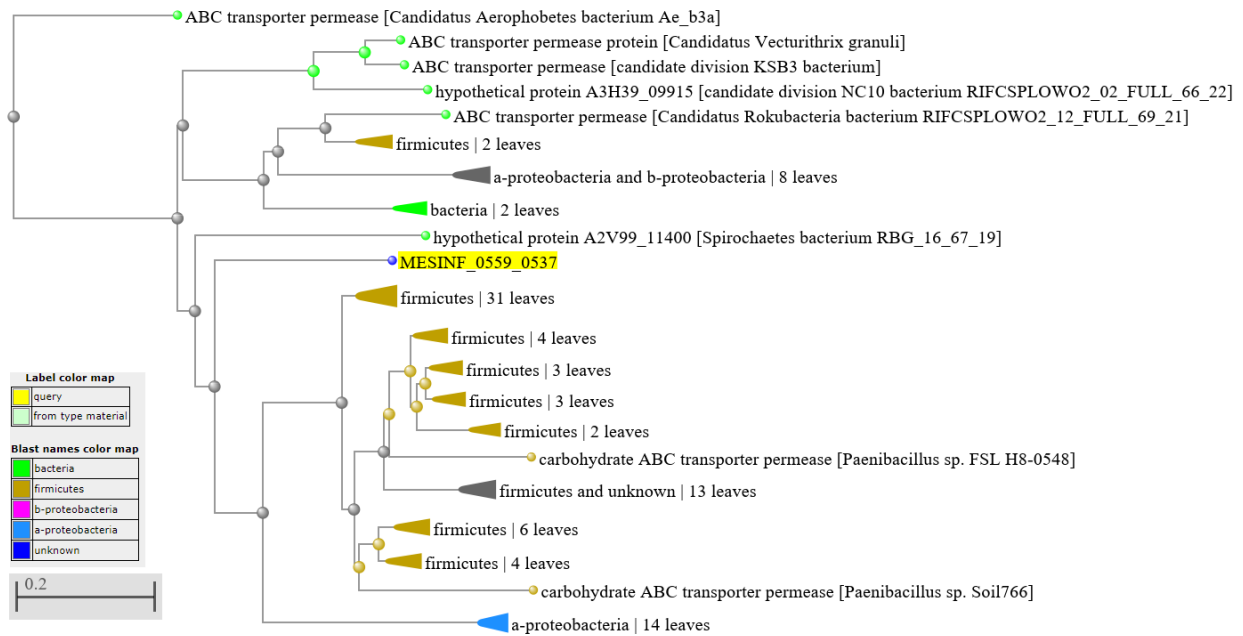
15- MESINF_0559_1430: methyltransferase



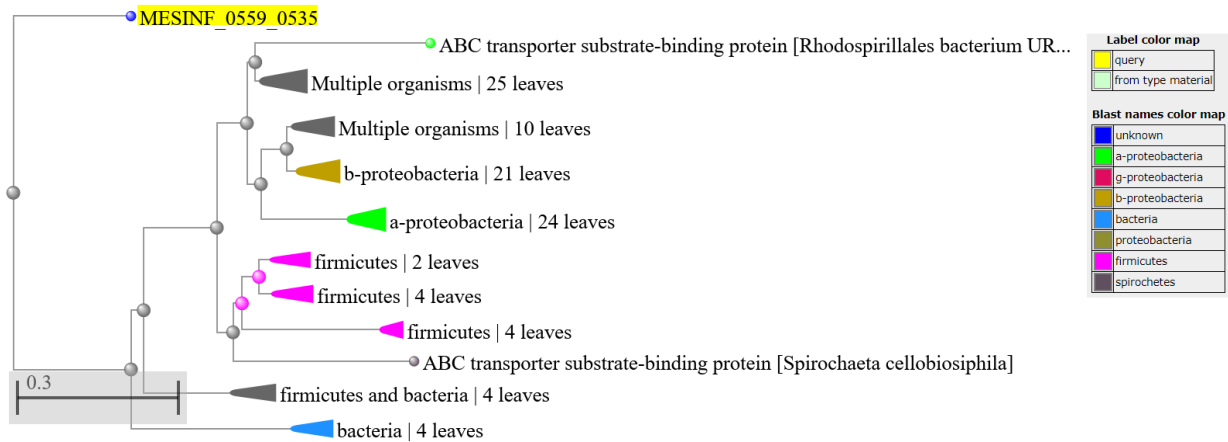
16- MESINF_0559_1107: ABC transporter



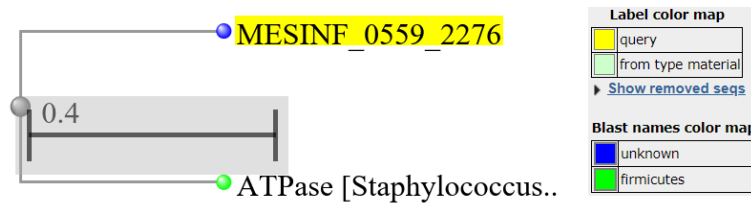
17- MESINF_0559_0537: ABC transporter permease



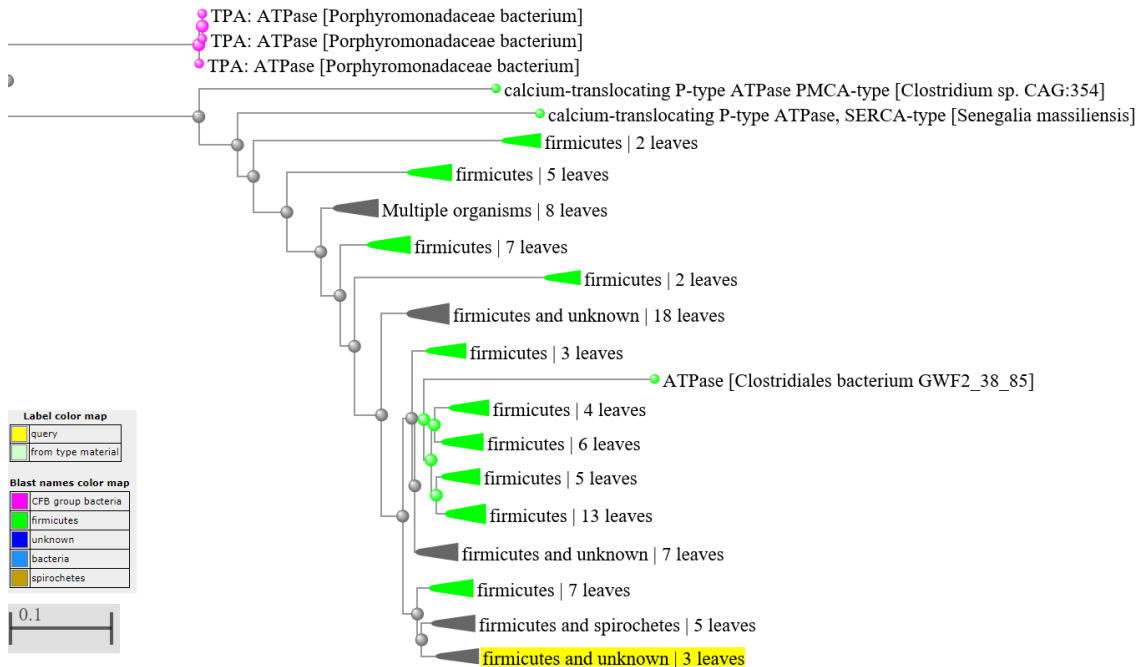
18- MESINF_0559_0535: ABC transporter substrate binding protein



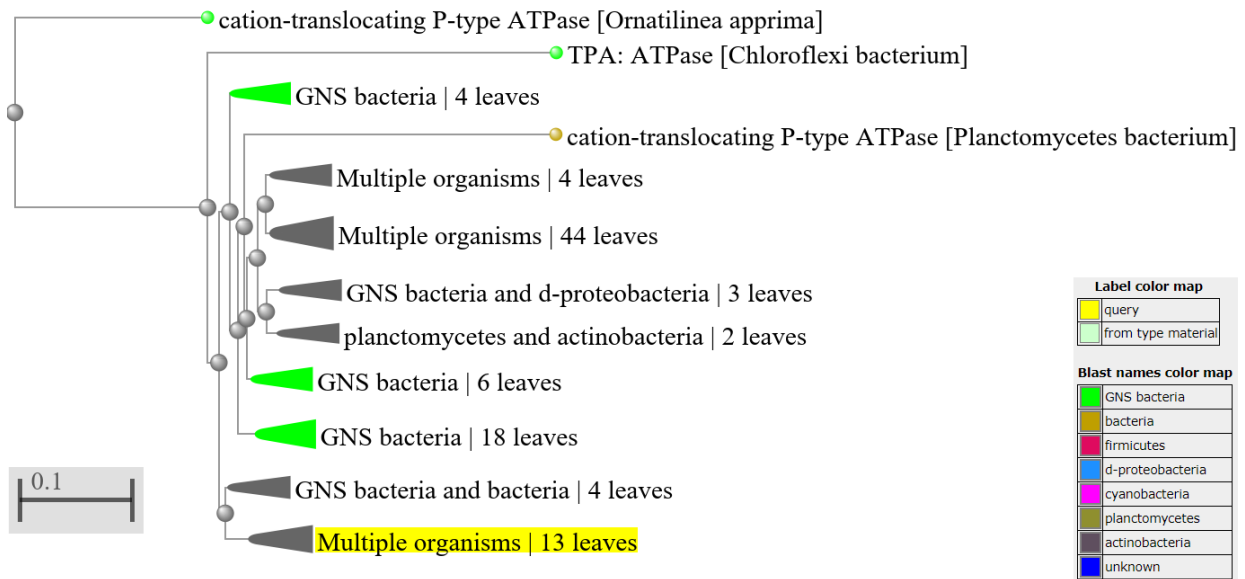
19- MESINF_0559_2276: ATPase



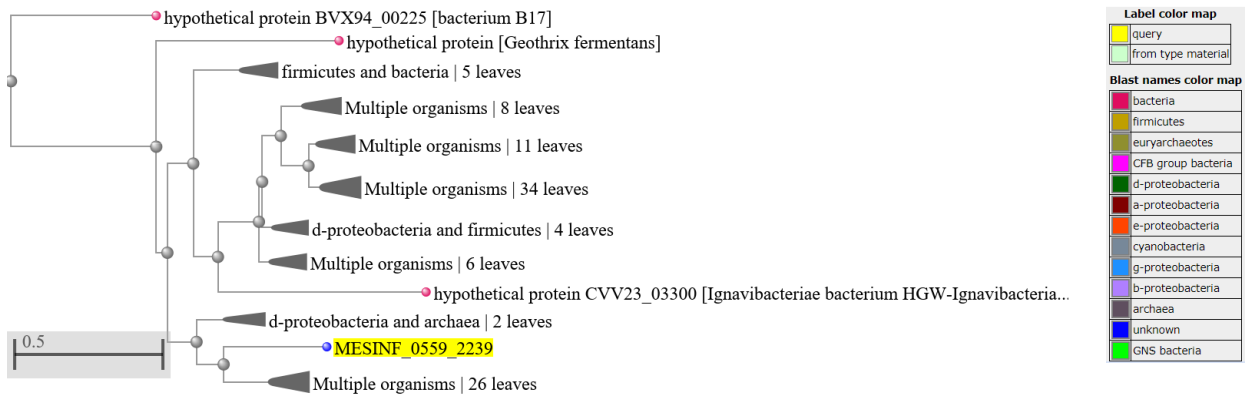
20- MESINF_0559_0017: ATPase



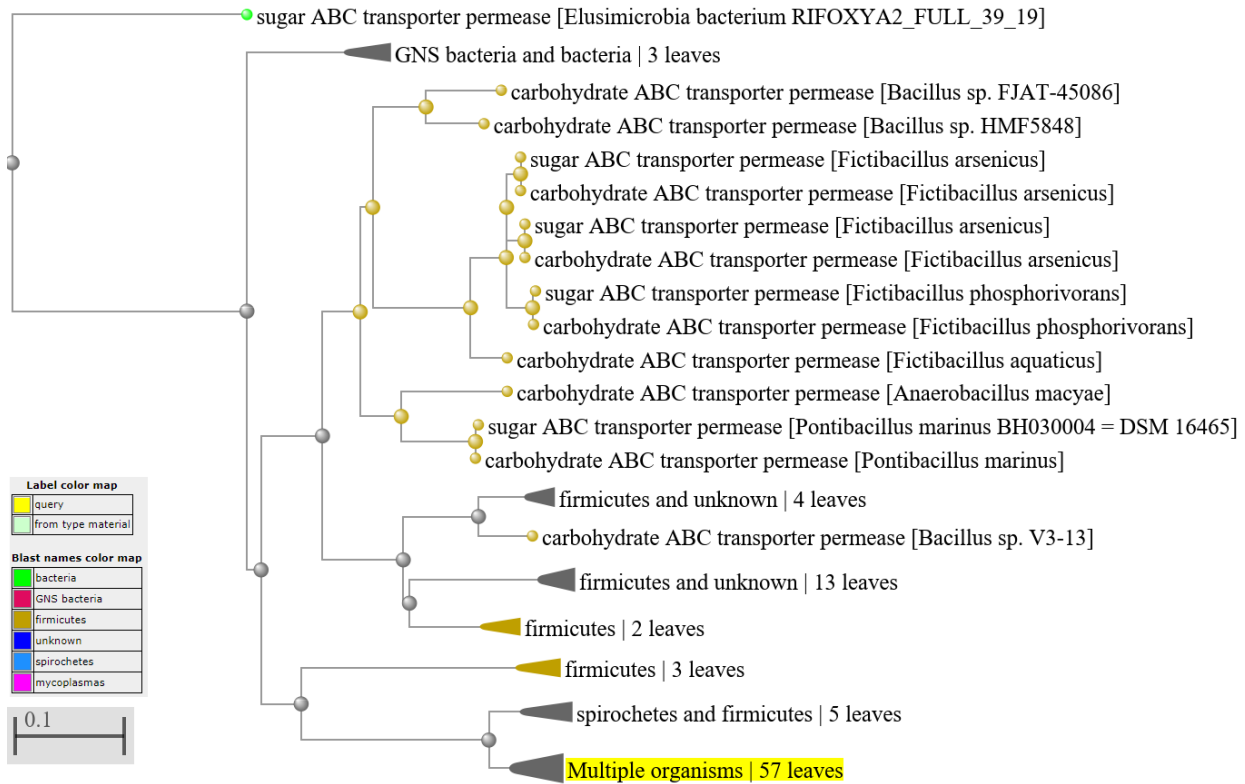
21- MESINF_0559_0731: ATPase: cation translocating P-Type ATPase



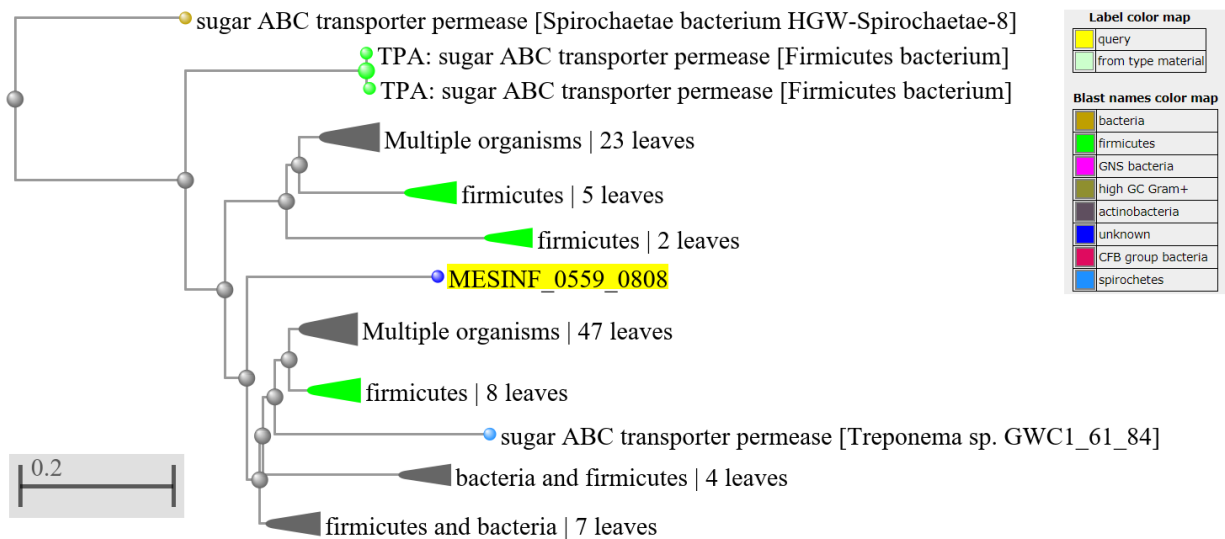
22- MESINF_0559_2239: ATP-grasp domain-containing protein



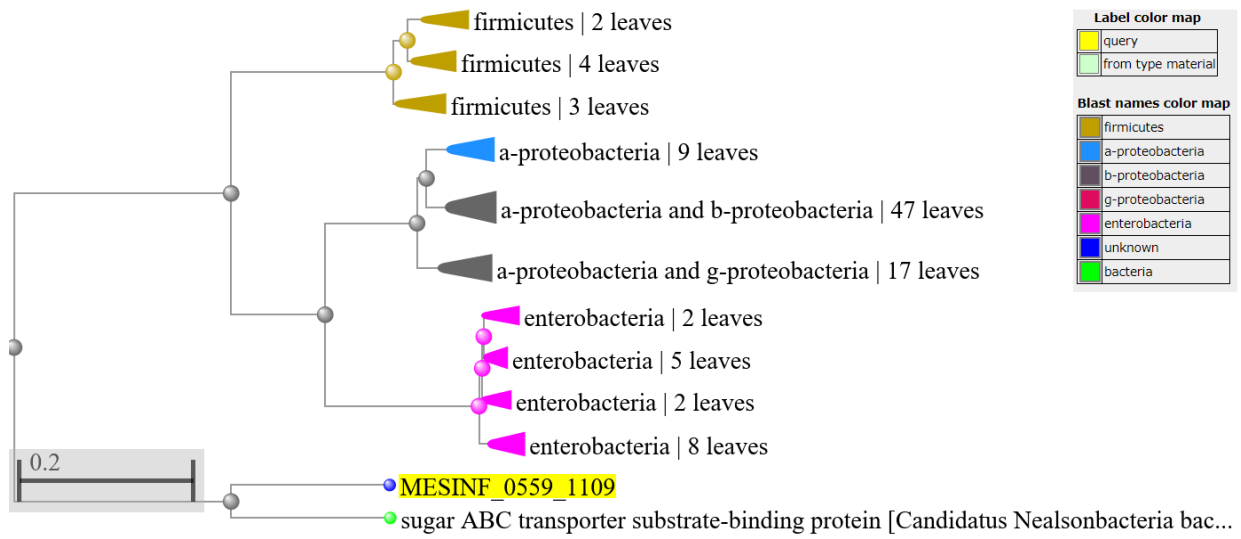
23- MESINF_0559_0807: Carbohydrate ABC transporter



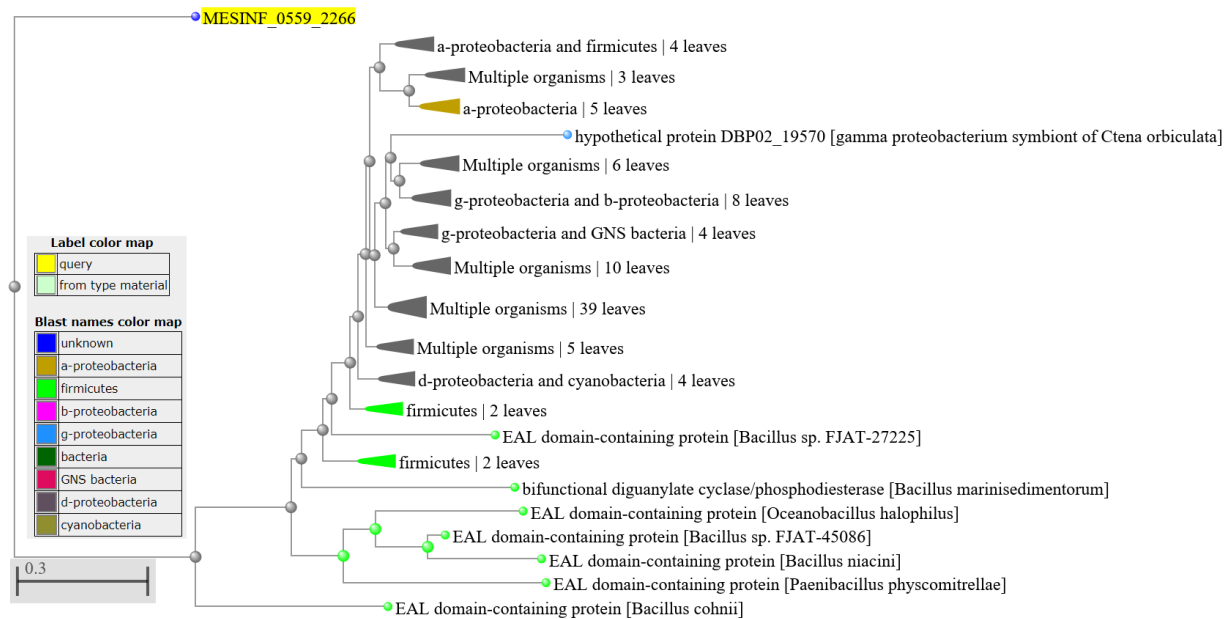
24- MESINF_0559_0808: Carbohydrate ABC transporter



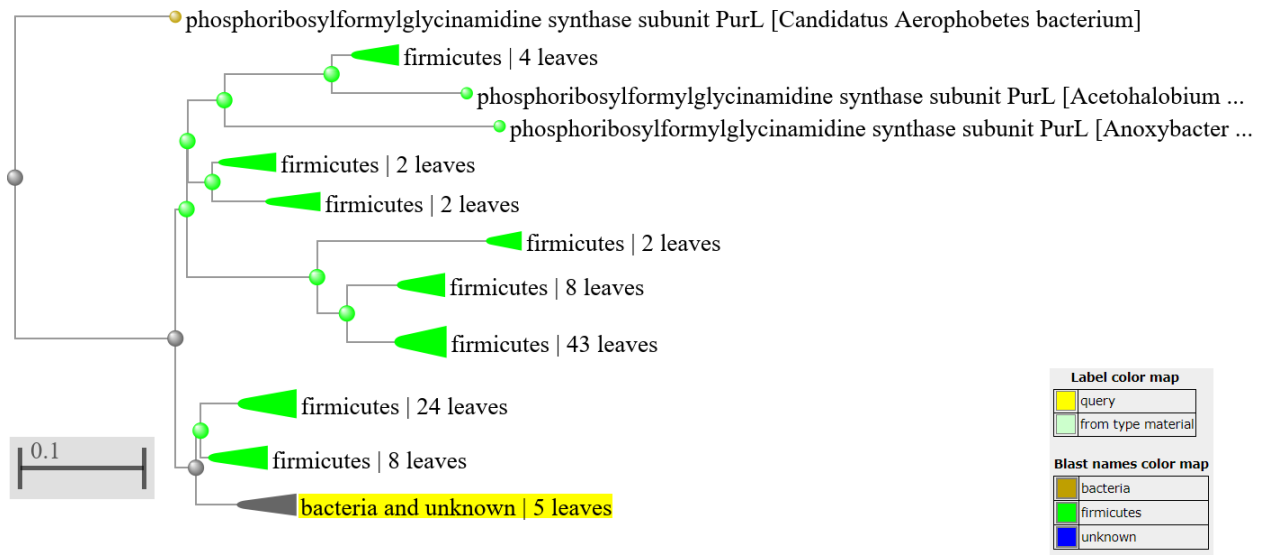
25- MESINF_0559_1109: Carbohydrate ABC transporter



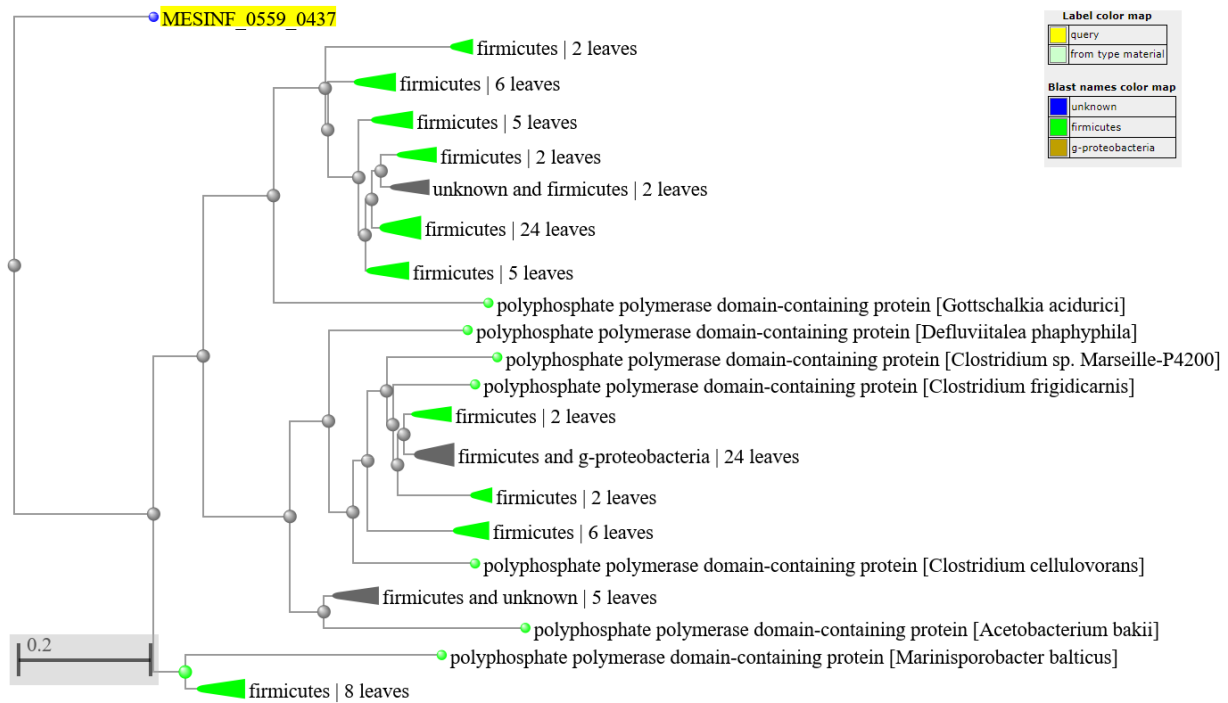
26- MESINF_0559_2266: EAL domain-containing protein



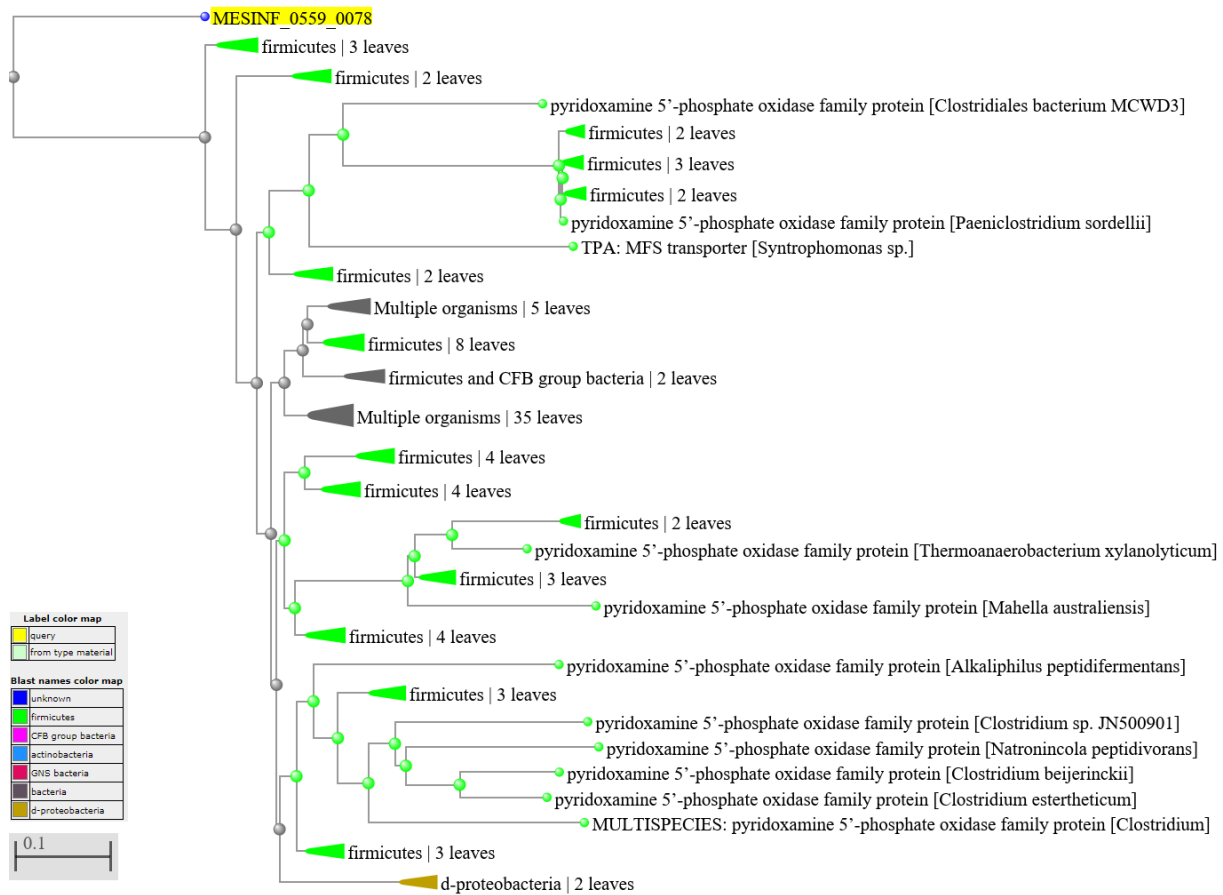
27- MESINF_0559_0559: Phosphoribosylformylglycinamide synthase subunit PurL



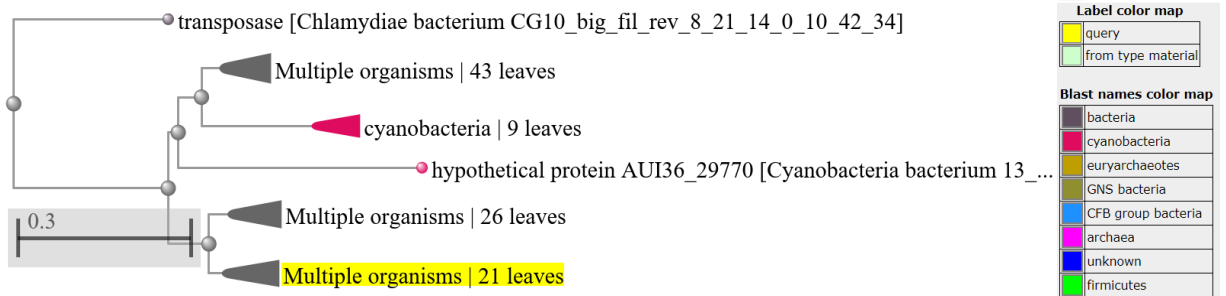
28- MESINF_0559_0437: polyphosphate



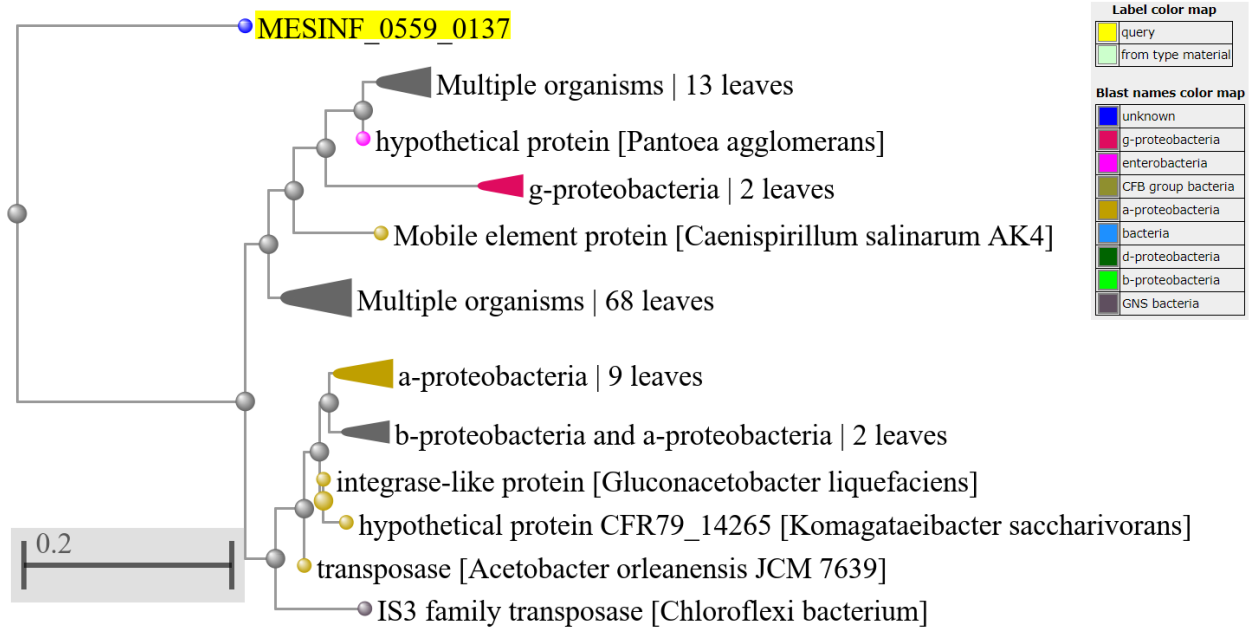
29- MESINF_0559_0078: Pyridoxamine 5'-phosphate oxidase



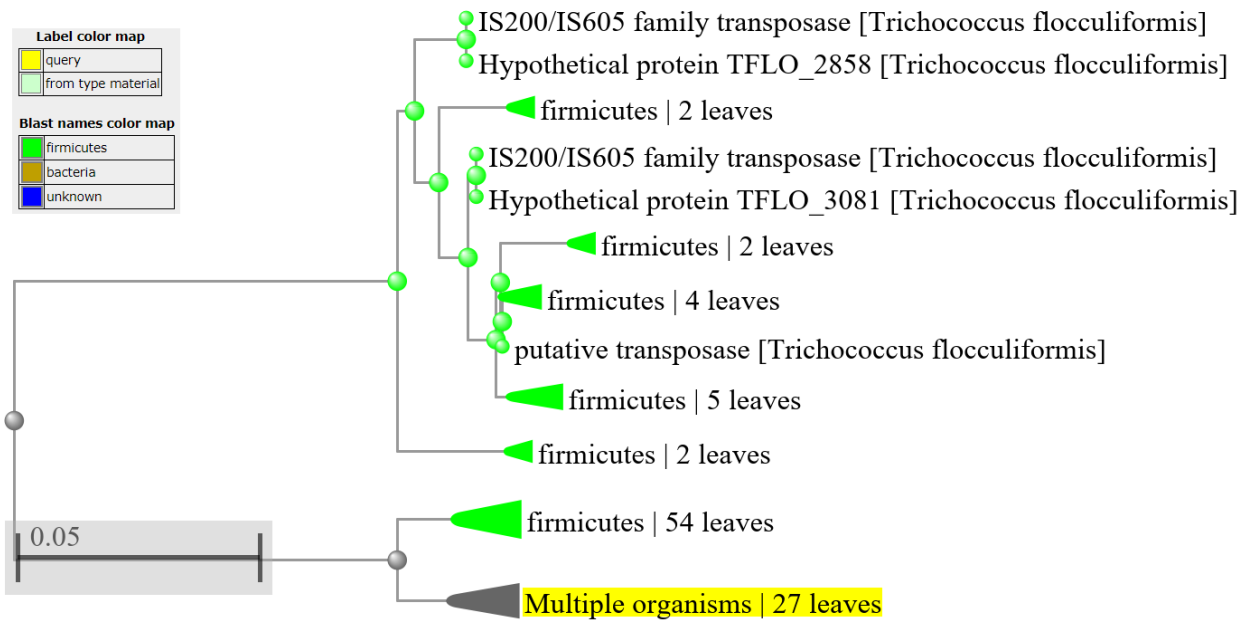
30- MESINF_0559_1439: Transposase



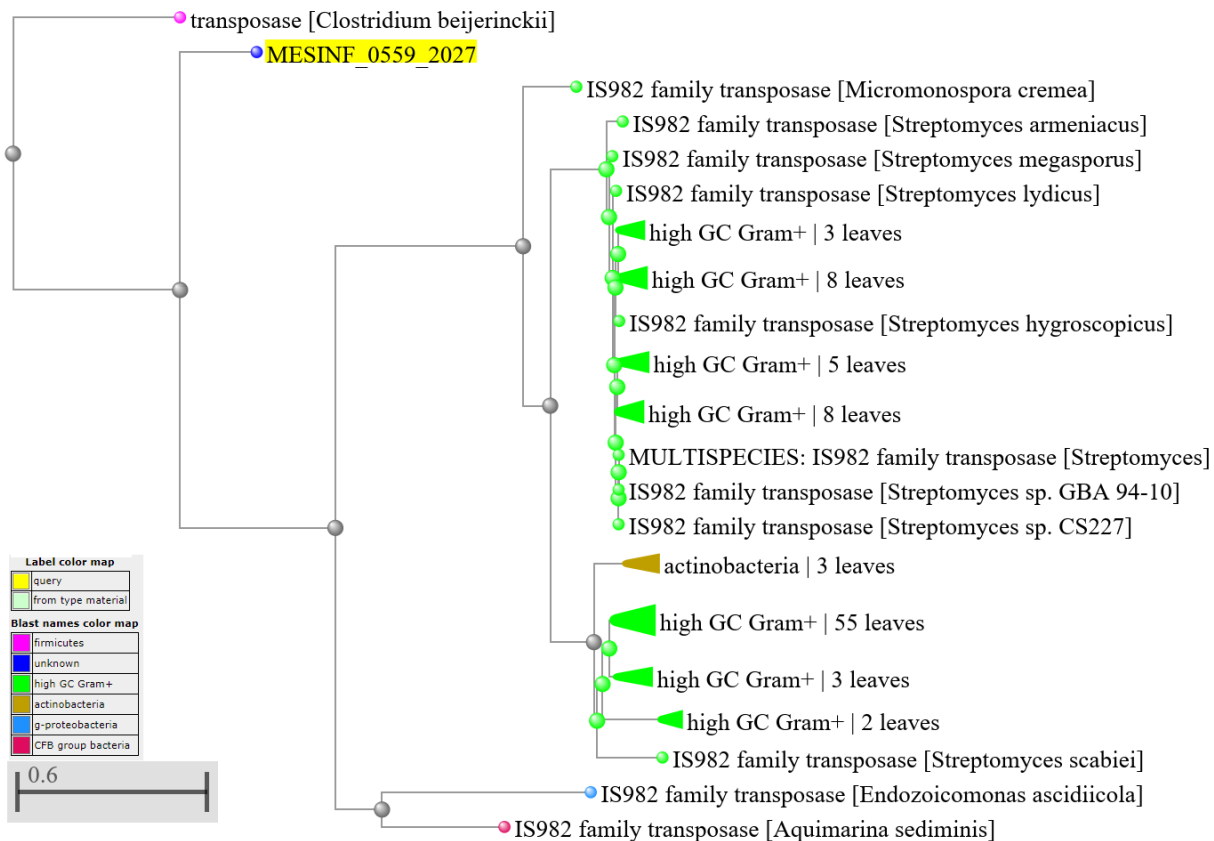
31- MESINF_0559_0137: Transposase



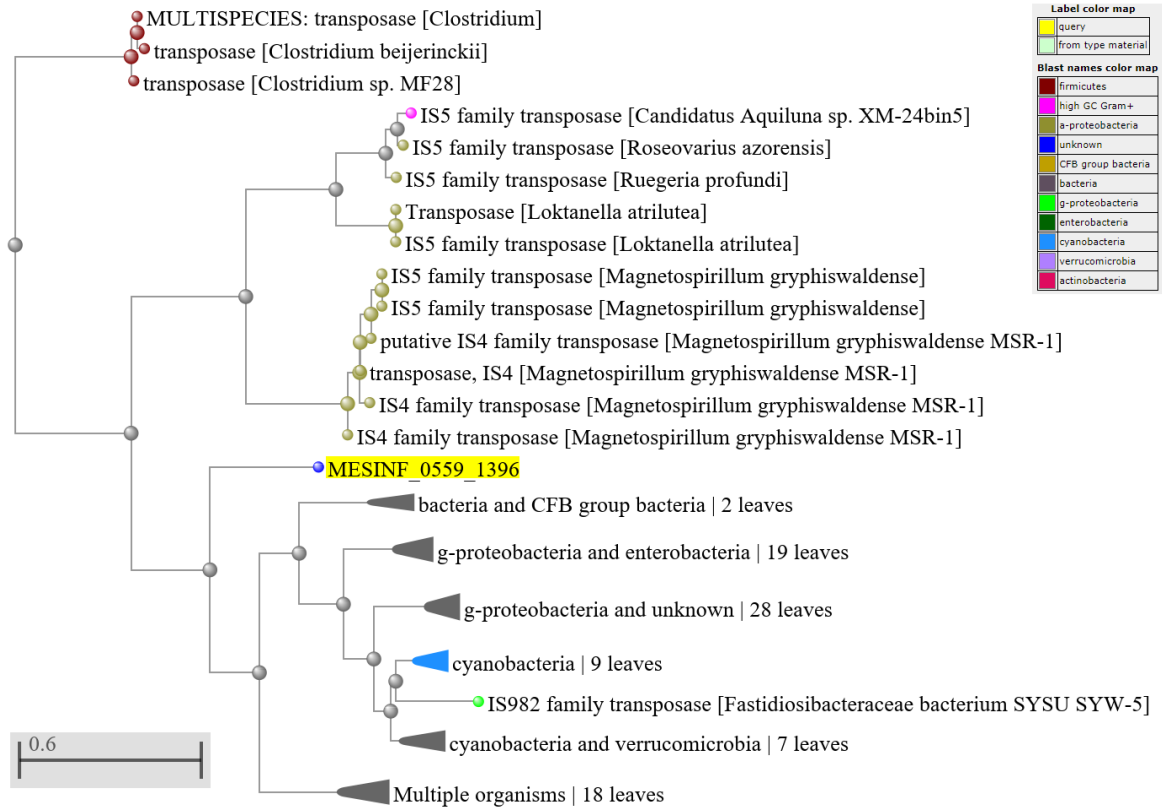
32- MESINF_0559_0609: Transposase



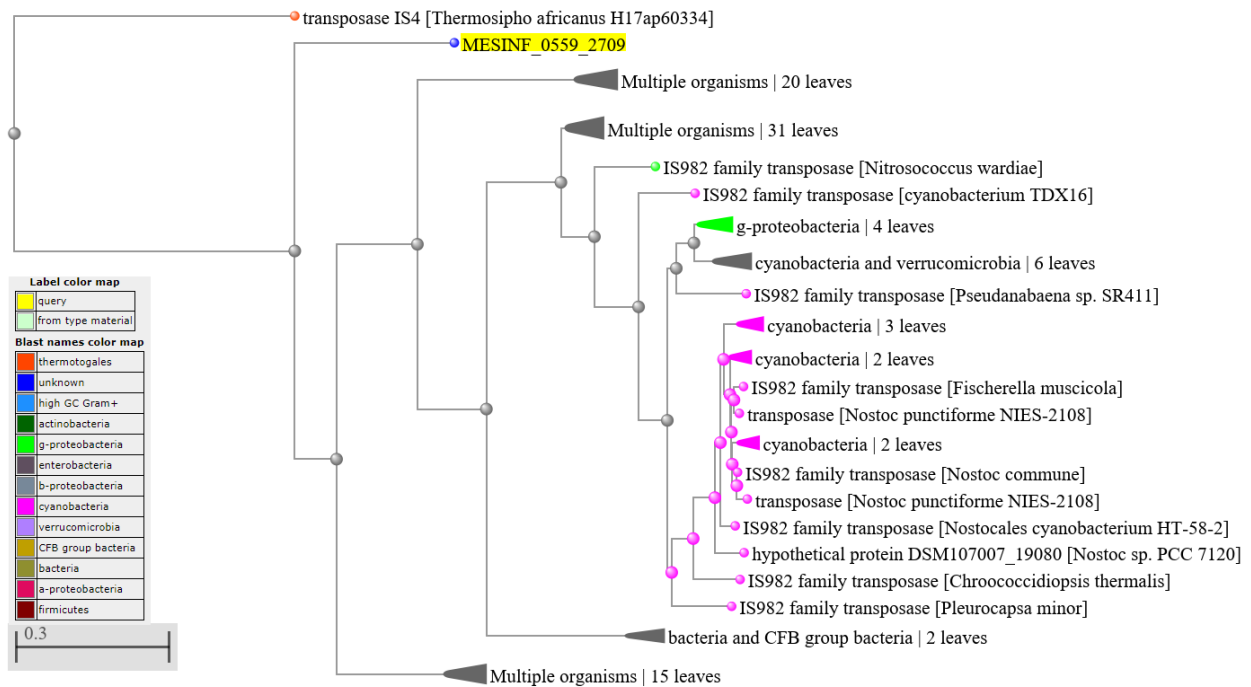
33- MESINF_0559_2027: Transposase



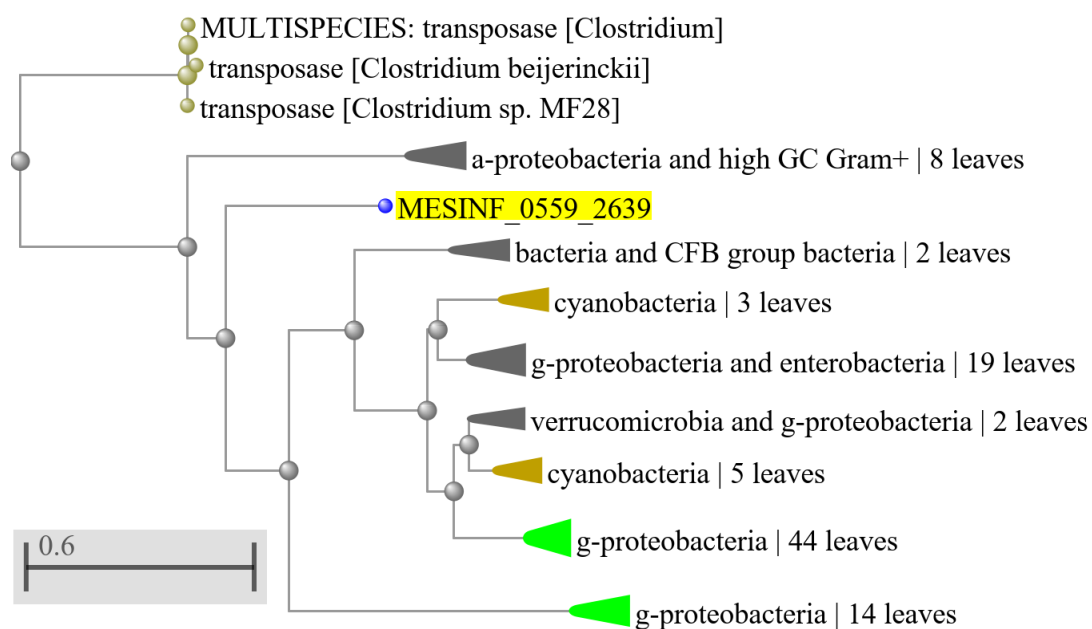
34- MESINF_0559_1396: Transposase



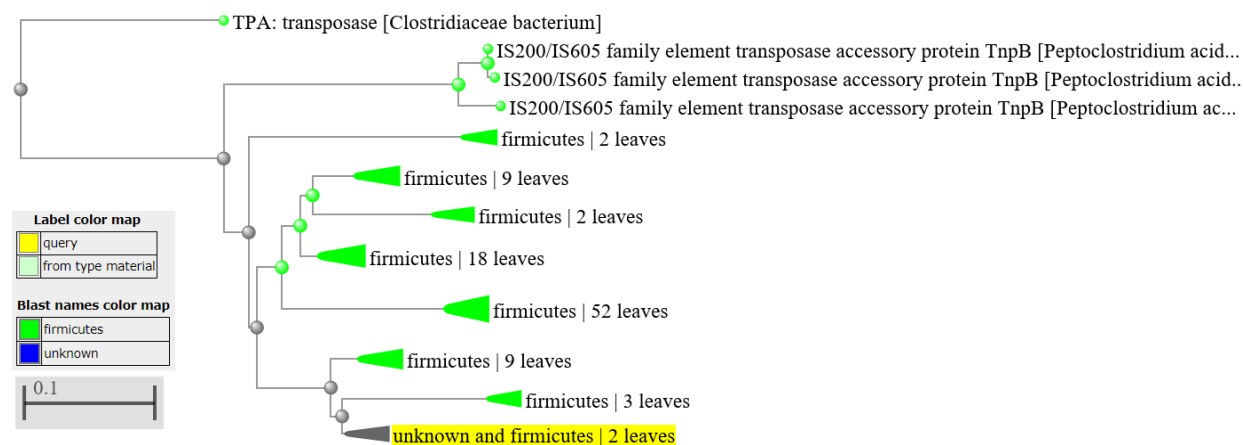
35- MESINF_0559_2709: Transposase



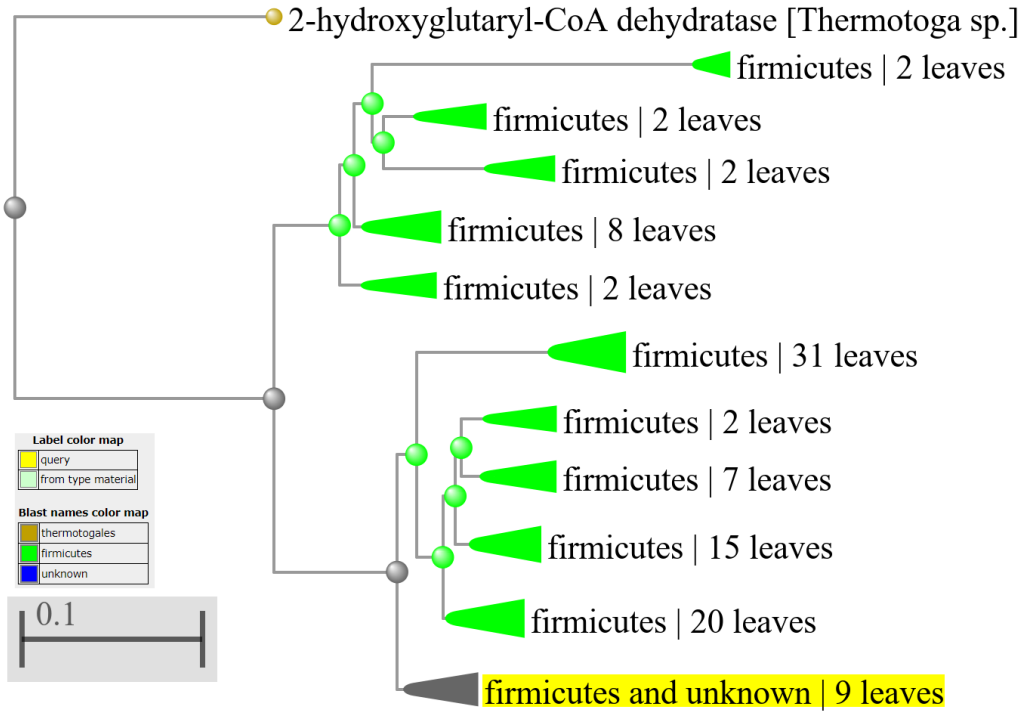
36- MESINF_0559_2639: Transposase



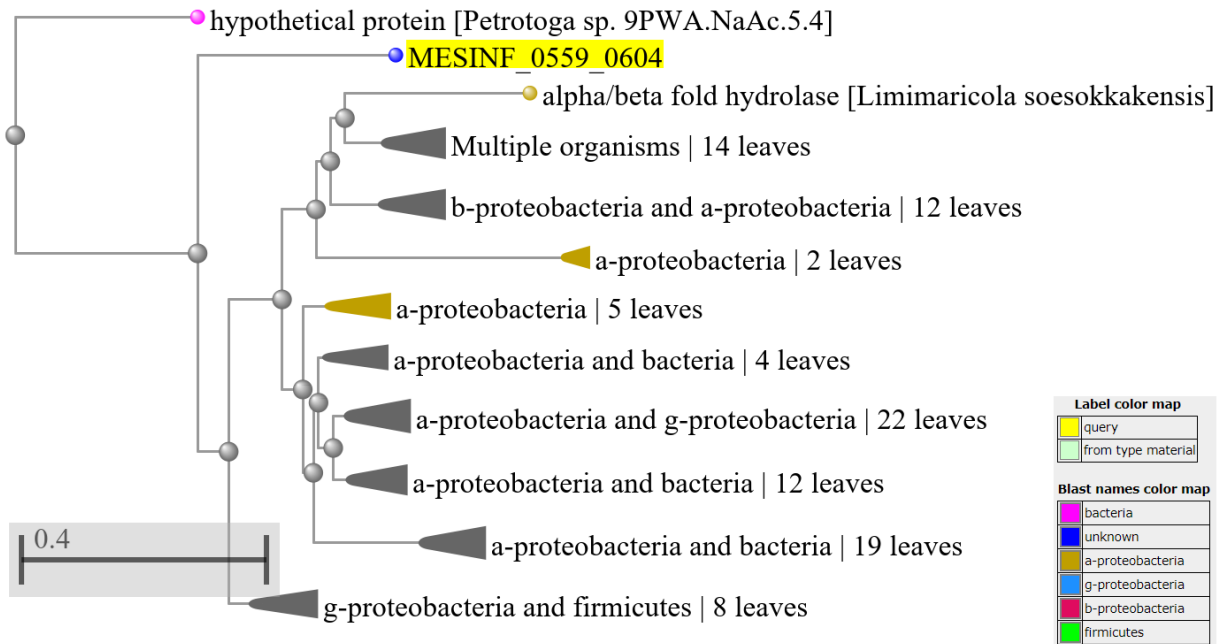
37- MESINF_0559_0608: Transposase



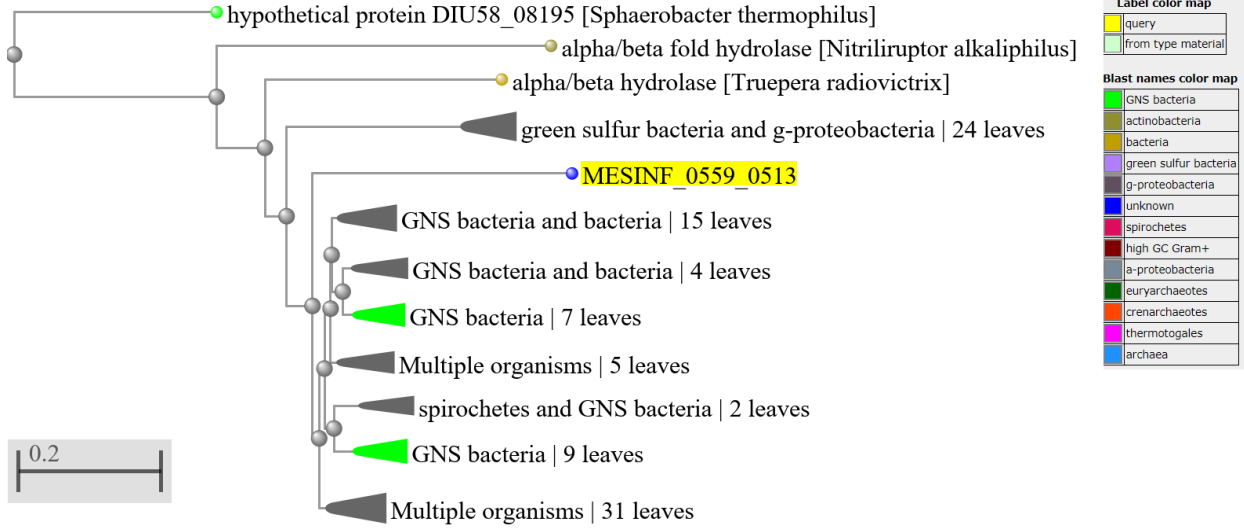
38- MESINF_0559_1435: 2-hydroxypropyl-CoA dehydratase



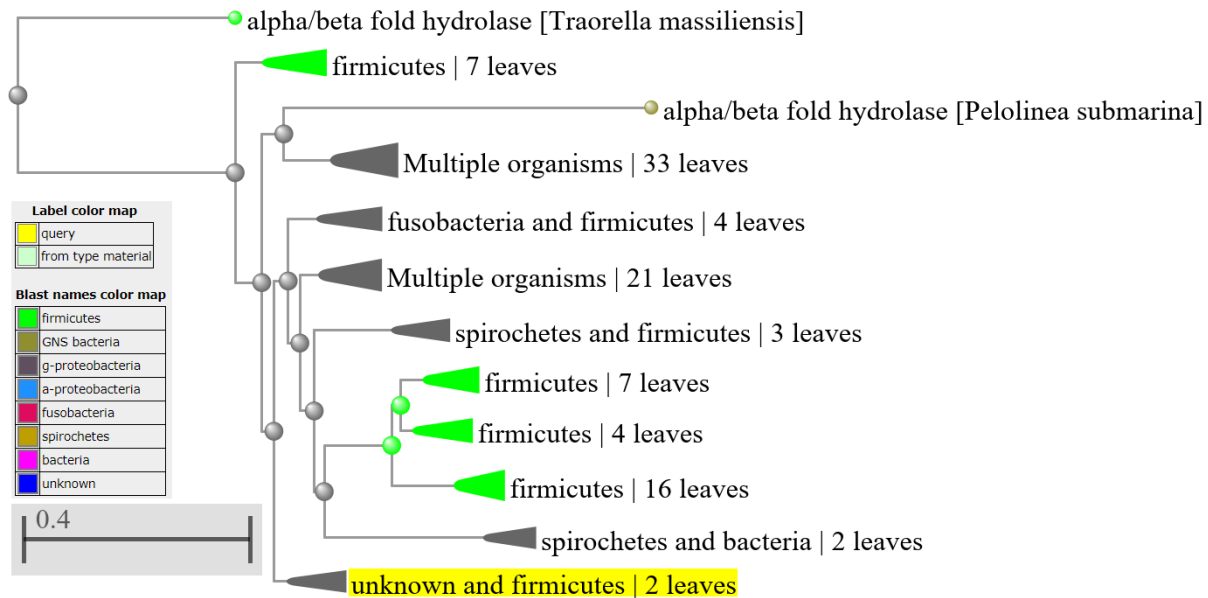
39- MESINF_0559_0604: alpha/beta fold hydrolase



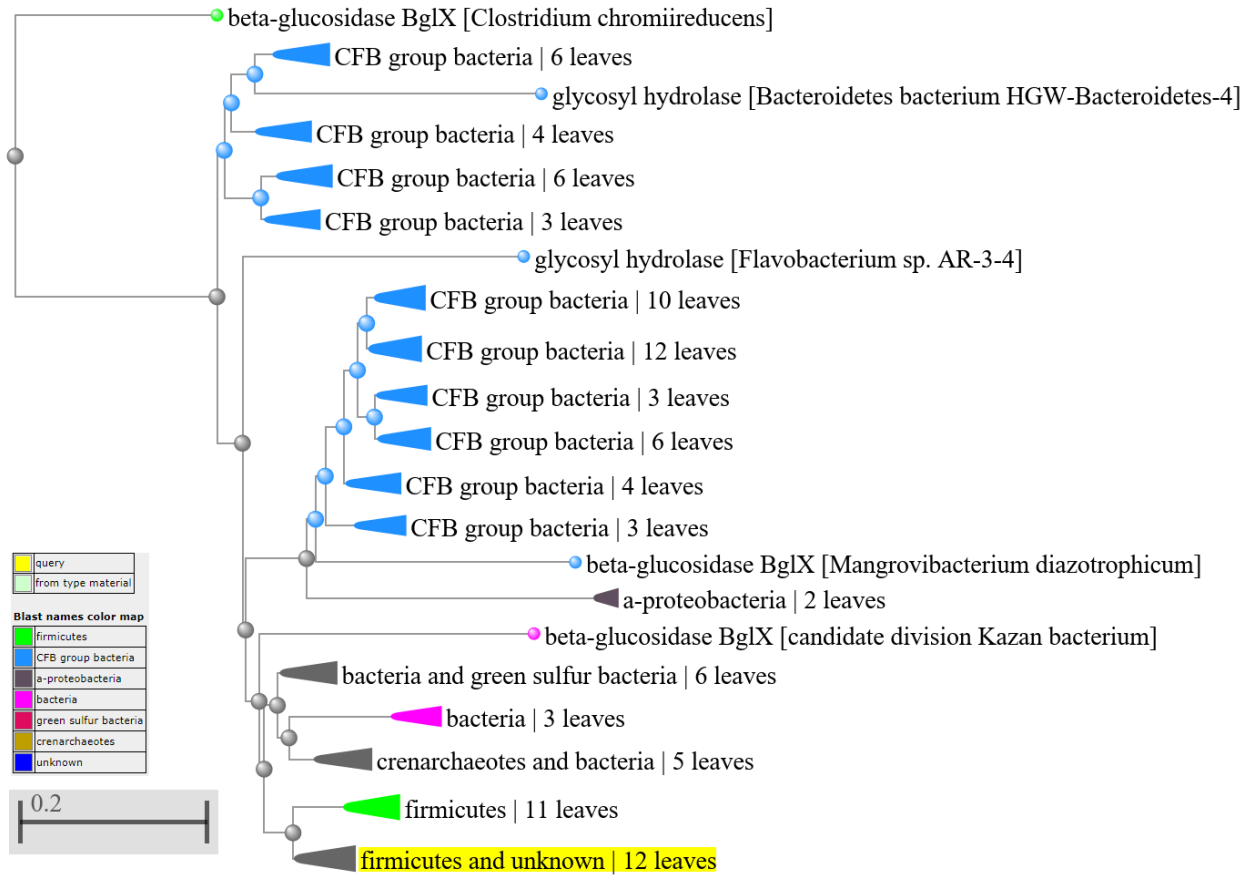
40- MESINF_0559_0513: alpha/beta fold hydrolase



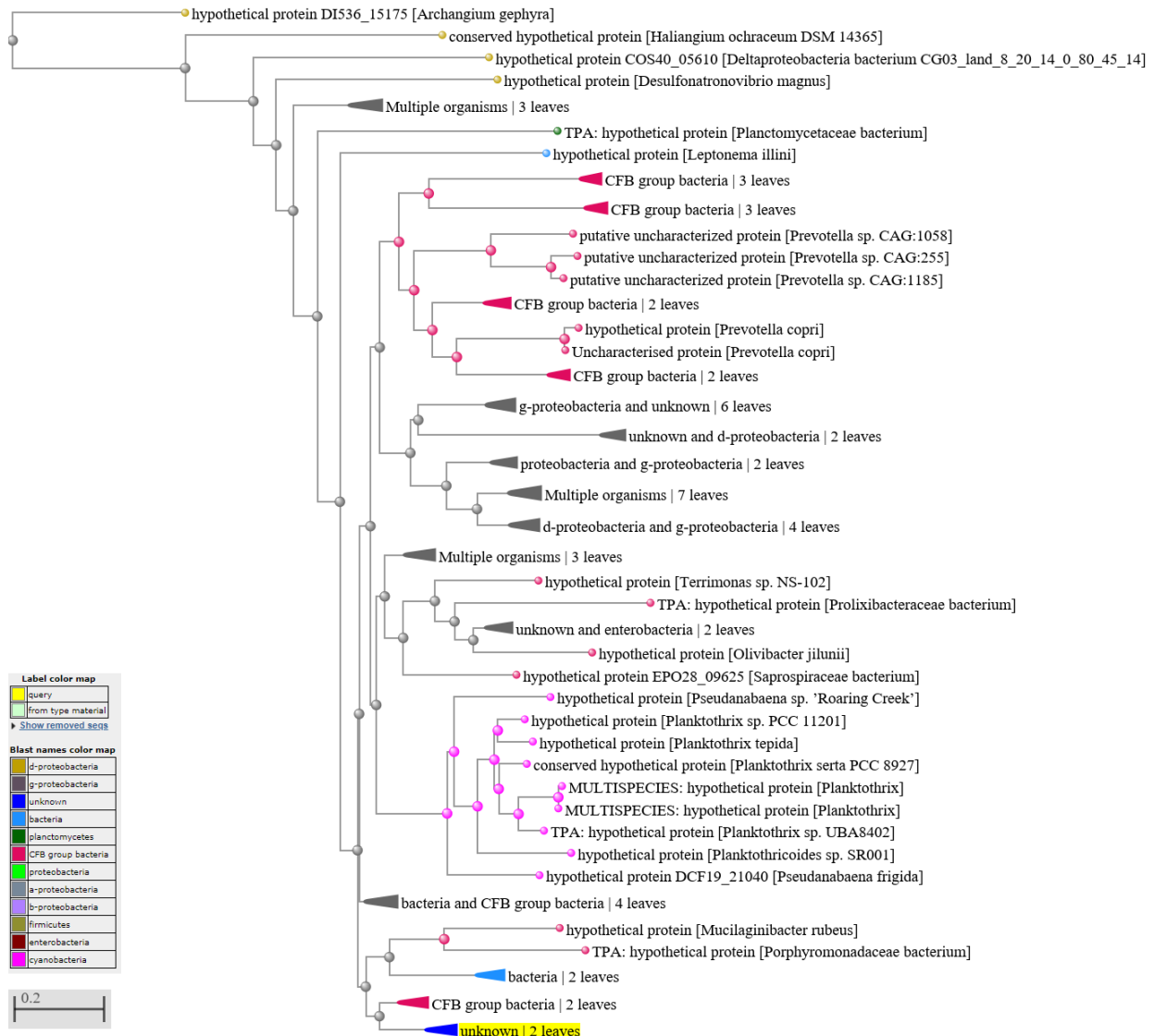
41- MESINF_0559_1084: alpha/beta fold hydrolase



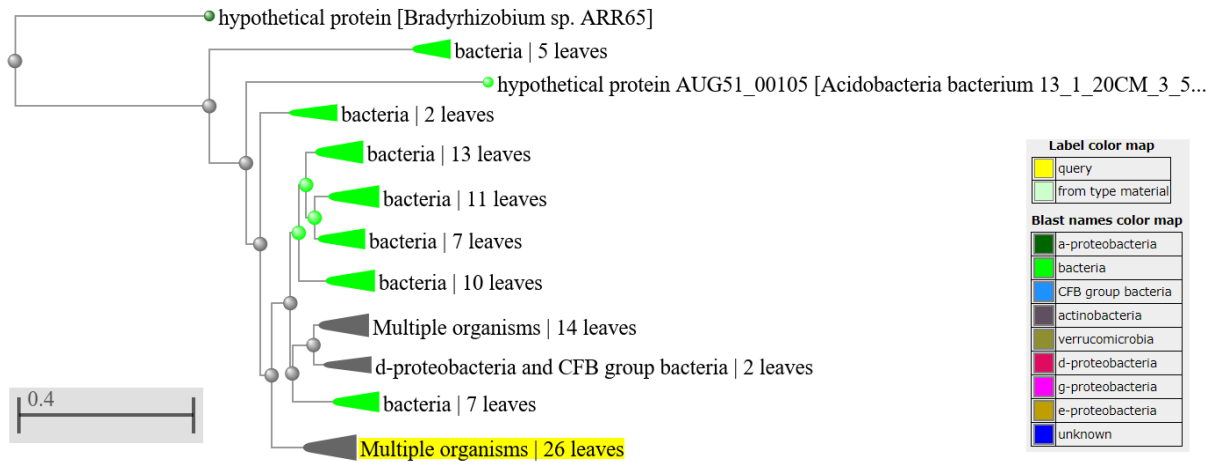
42- MESINF_0559_1317: Beta glucosidase



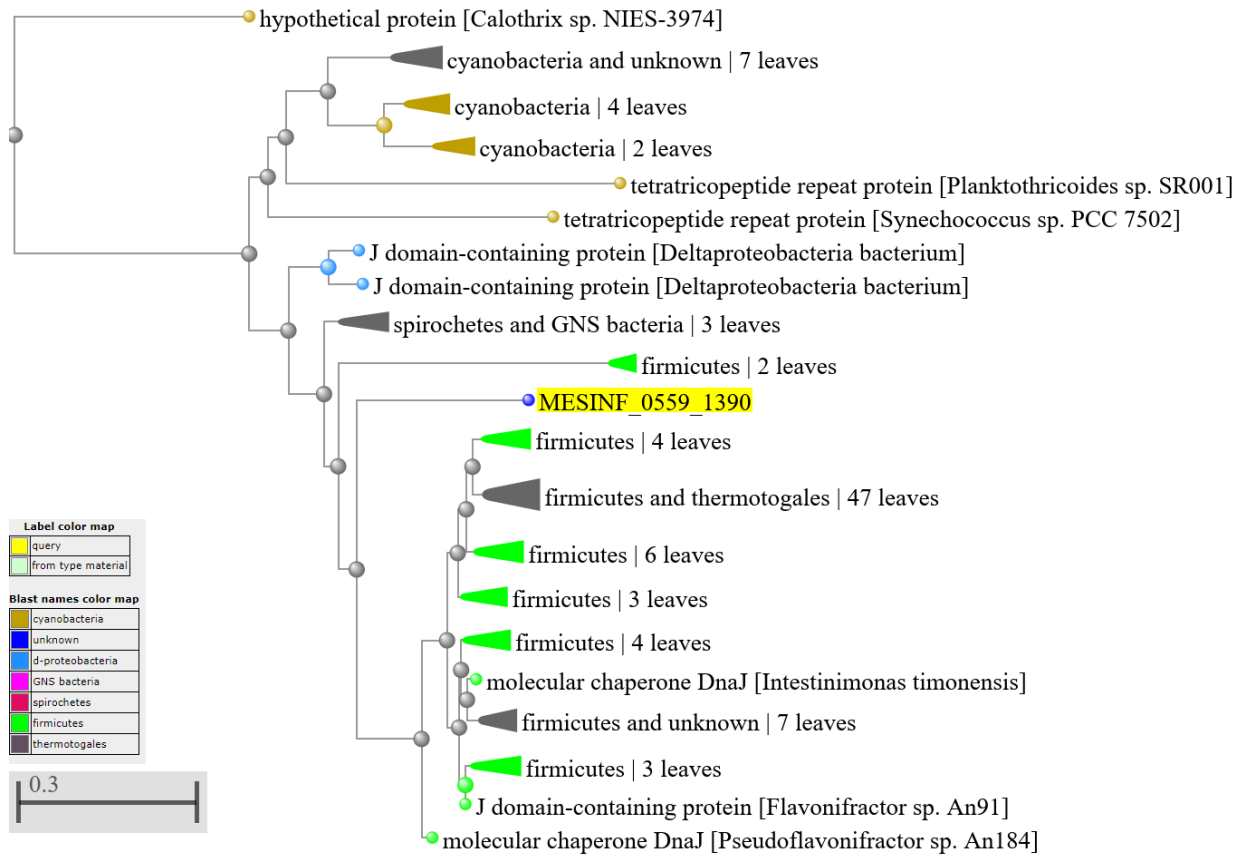
43- MESINF_0559_0693: carboxypeptidase family protein



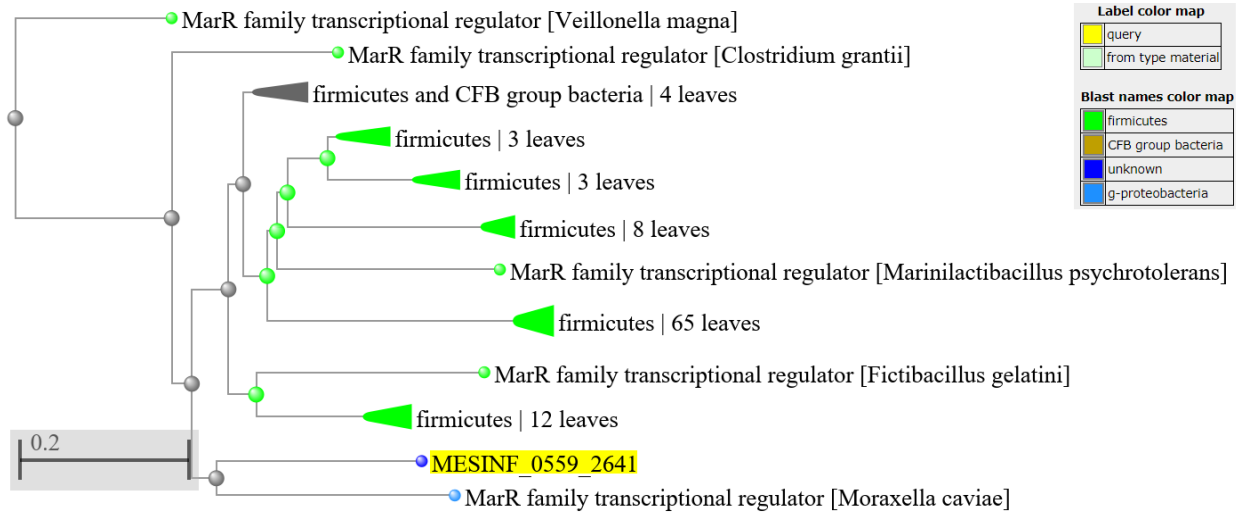
44- MESINF_0559_0623: M20/M25/M40 family metallo-hydrolase



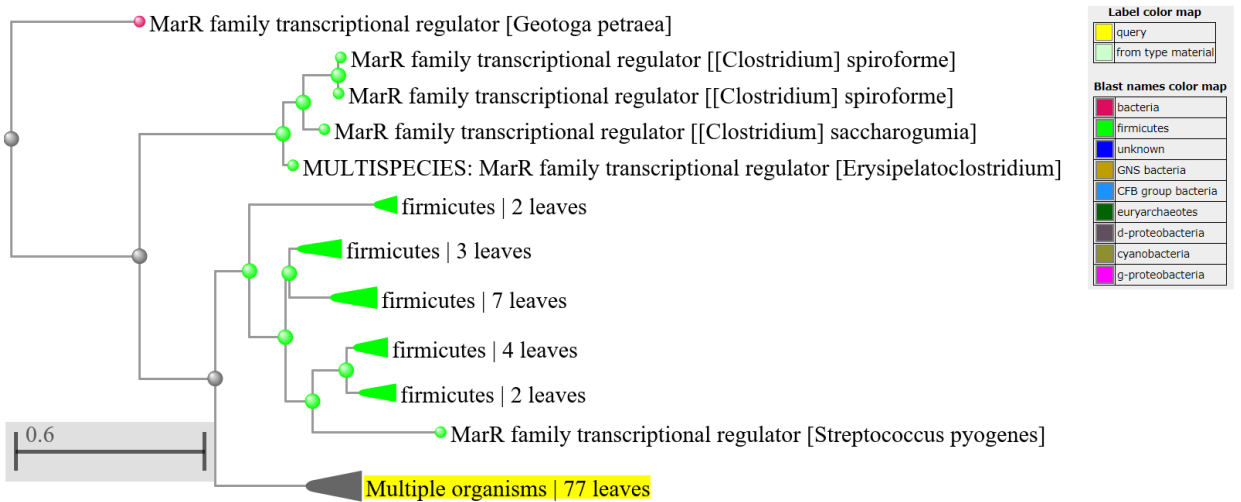
45- MESINF_0559_1390: J domain containing proteins



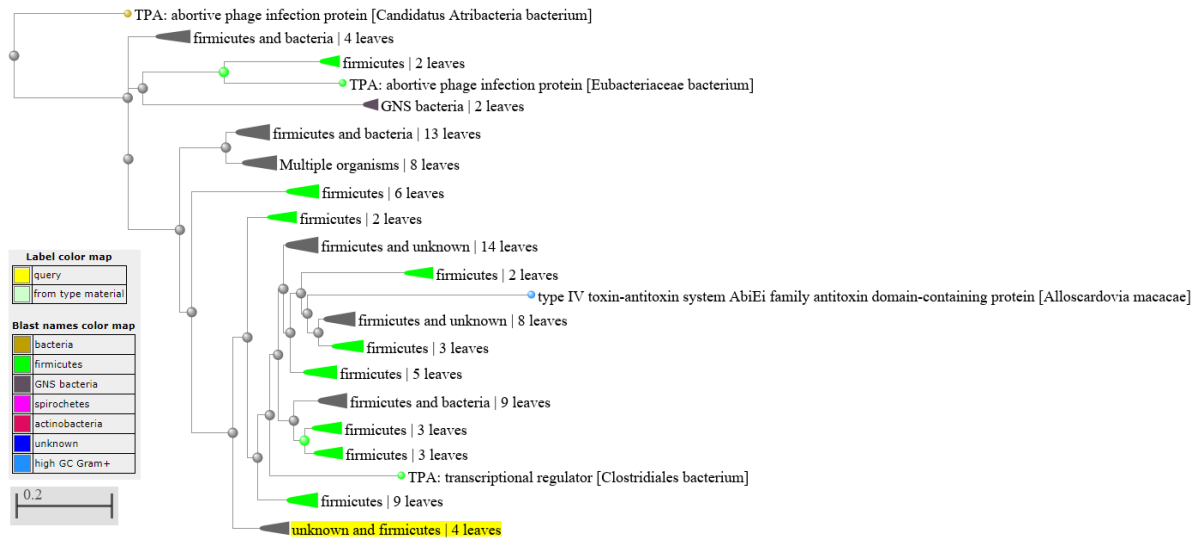
46- MESINF_0559_2641: MarR family transcriptional regulator



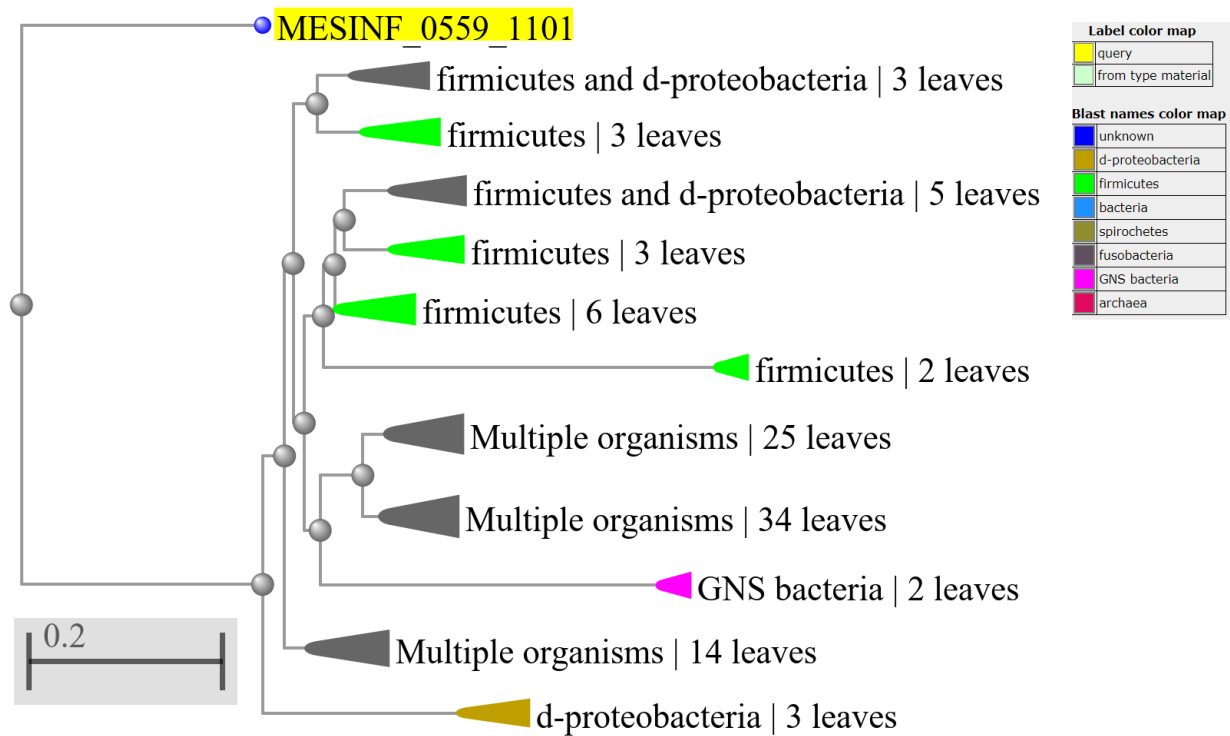
47- MESINF_0559_0407: MarR family transcriptional regulator



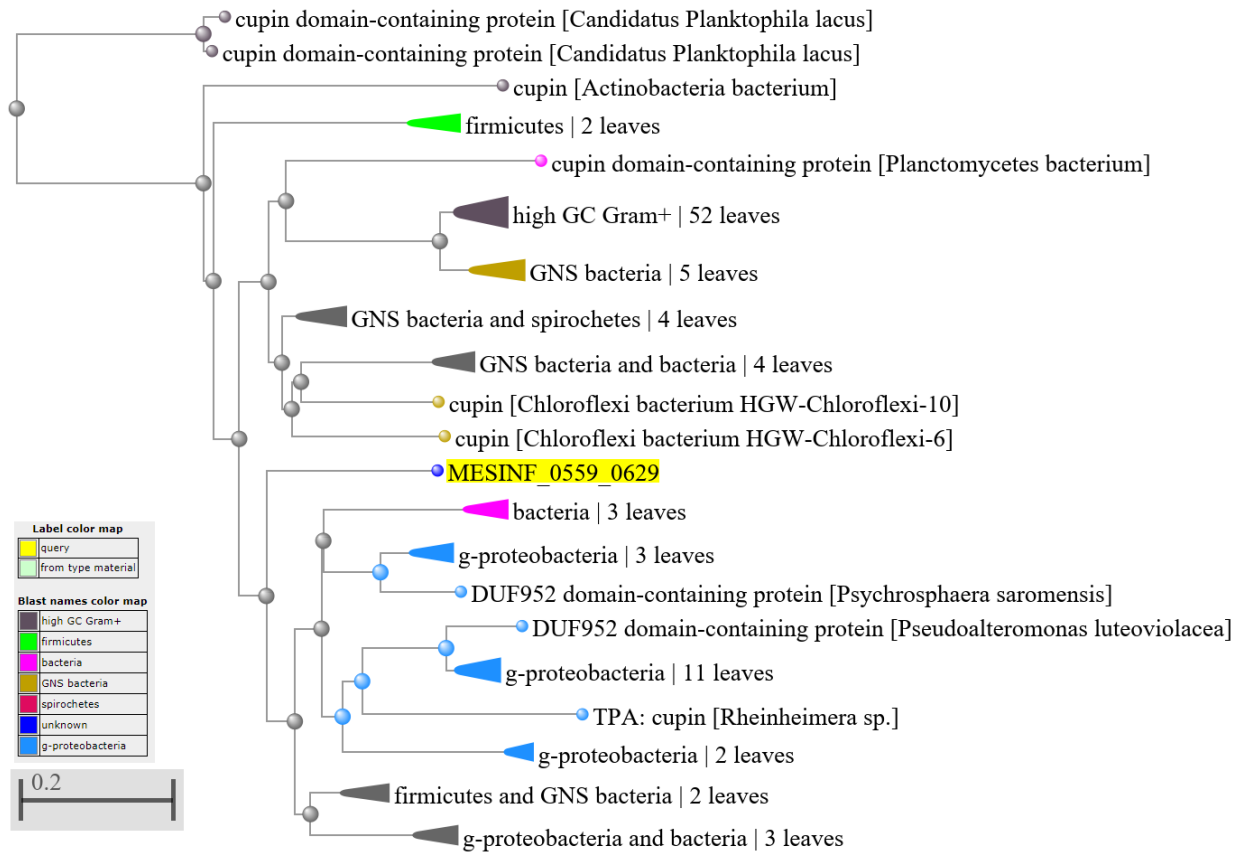
48- MESINF_0559_0667: Transcriptional regulator



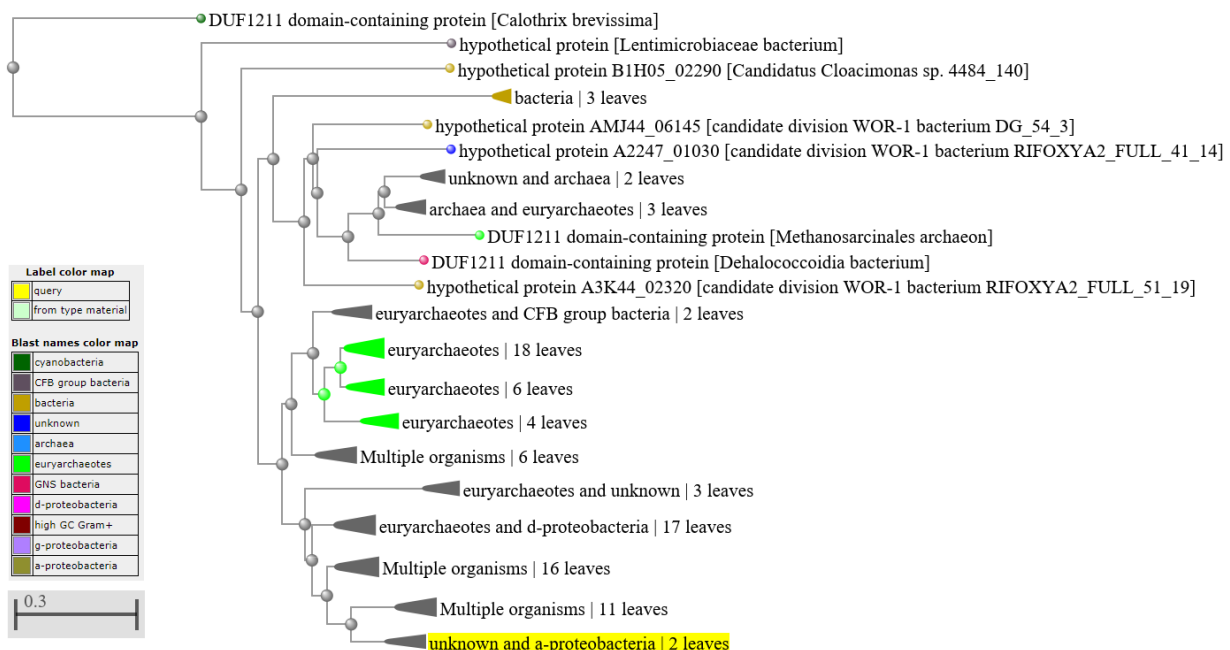
49- MESINF_0559_1101: aldehyde ferredoxin oxidoreductase



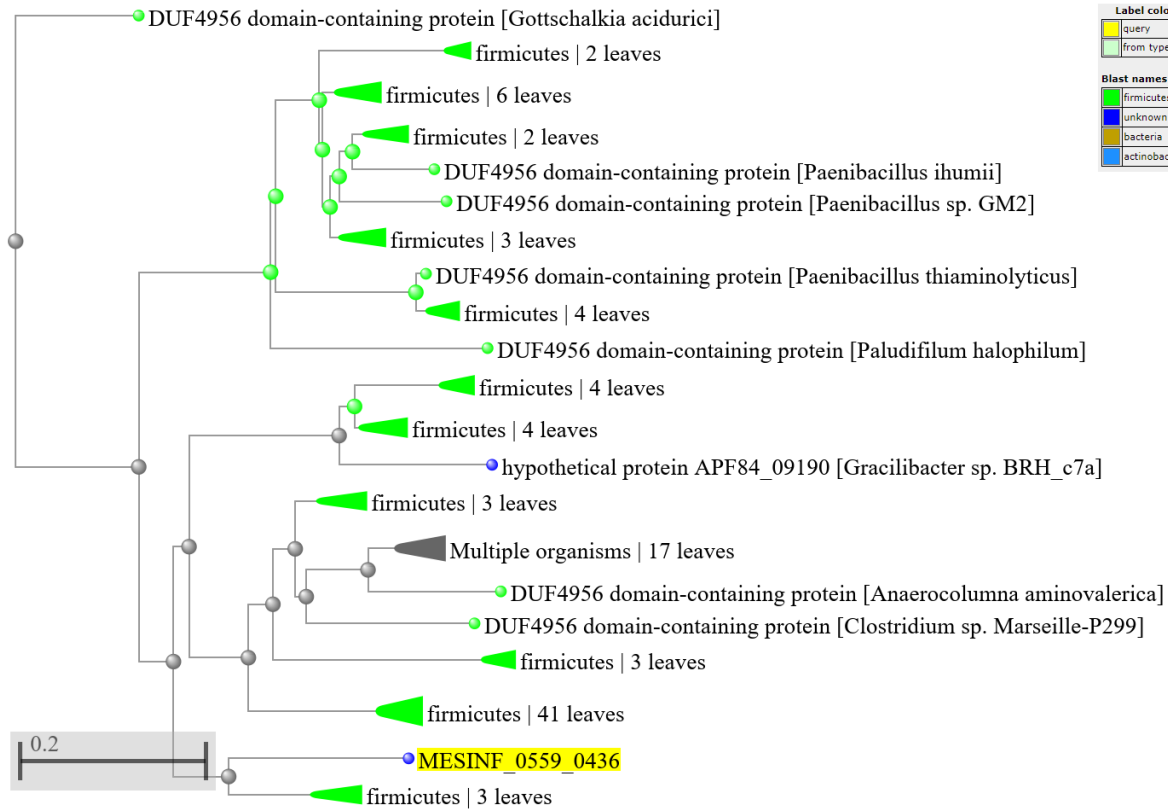
50- MESINF_0559_0629: Cupin domain-containing protein



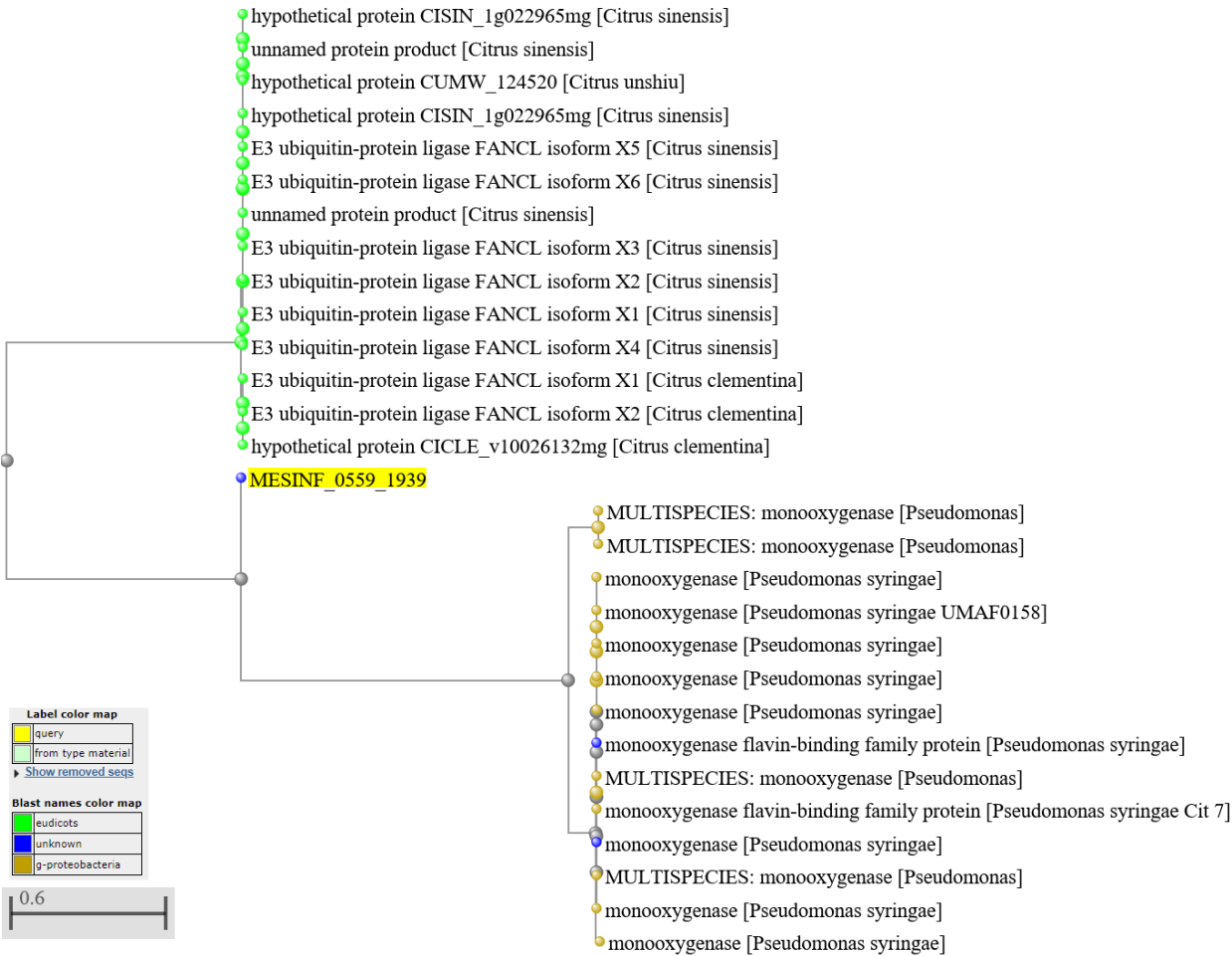
51- MESINF_0559_1563: DUF1211 domain containing proteins



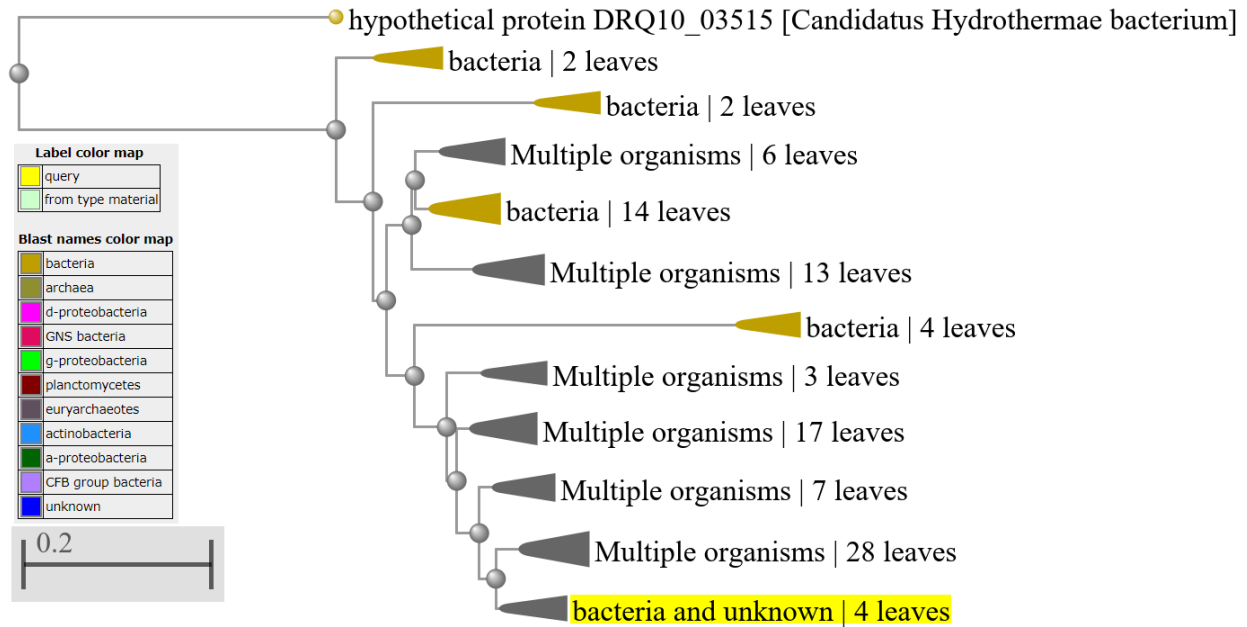
52- MESINF_0559_0436: DUF4956 domain-containing protein



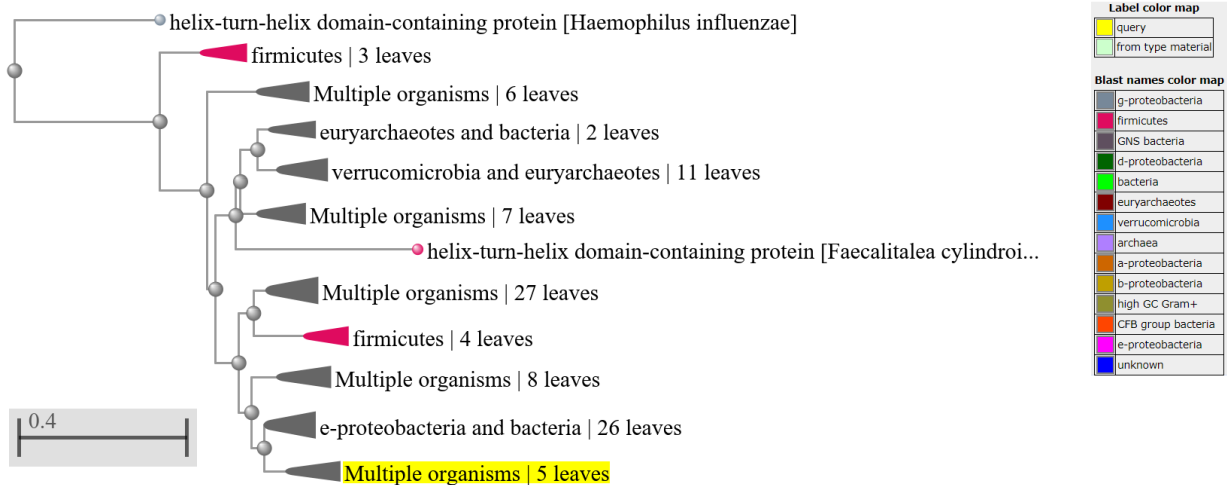
53- MESINF_0559_1939: Monooxygenase



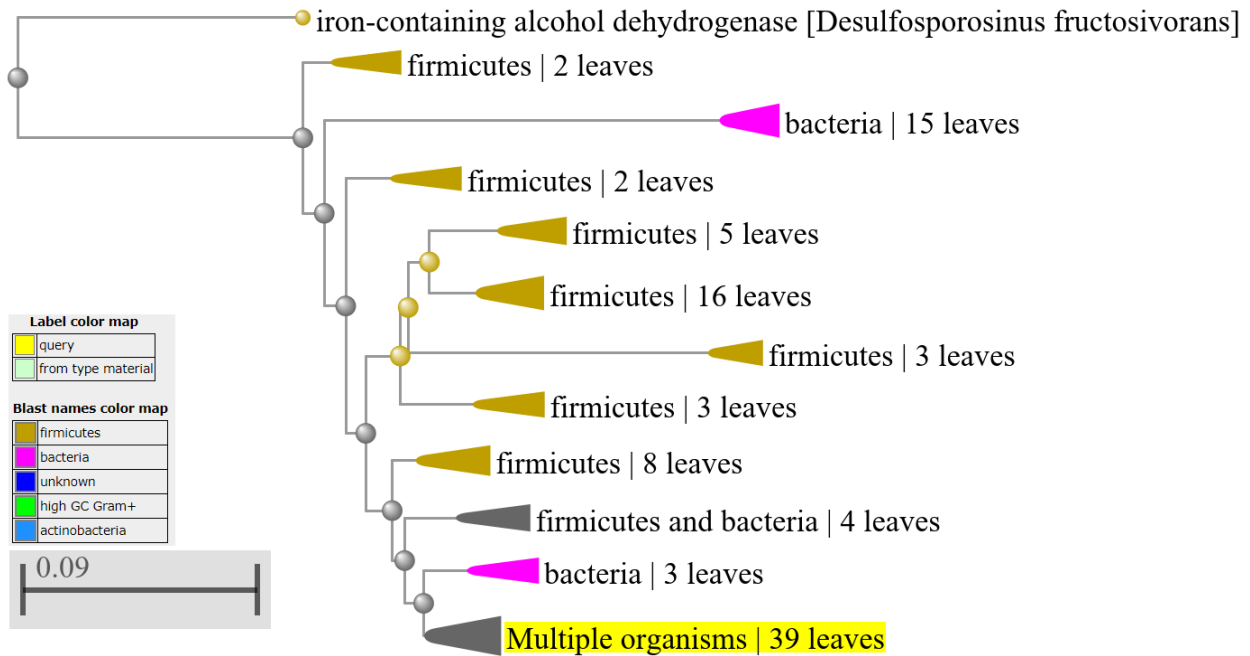
54- MESINF_0559_2722: fibronectin type III domain protein



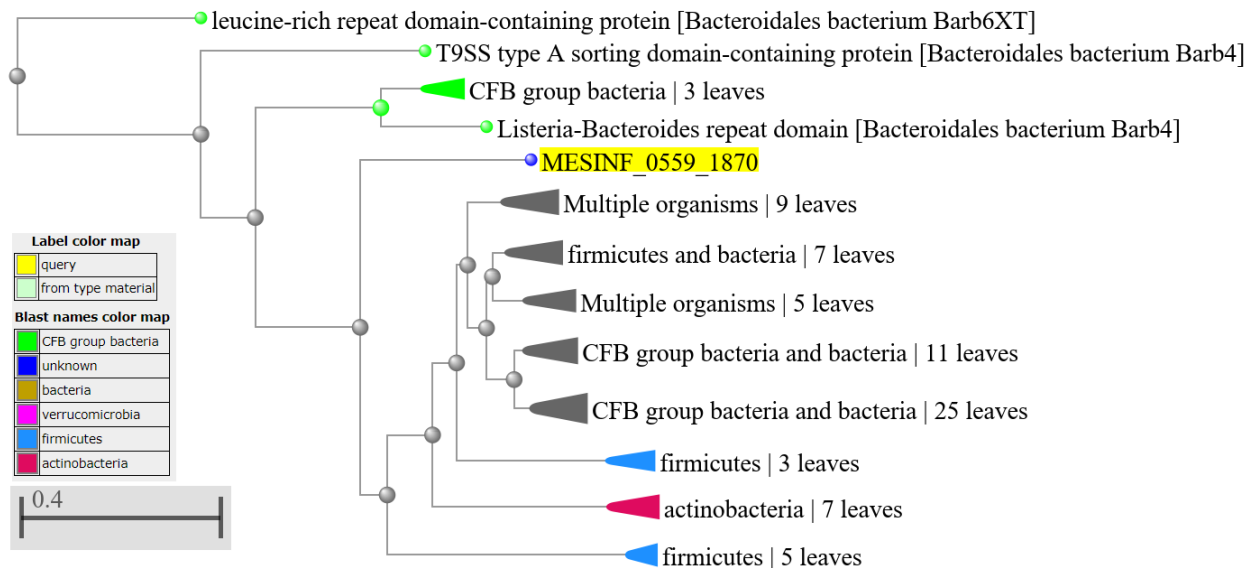
55- MESINF_0559_2226: Helix-turn-helix domain-containing protein



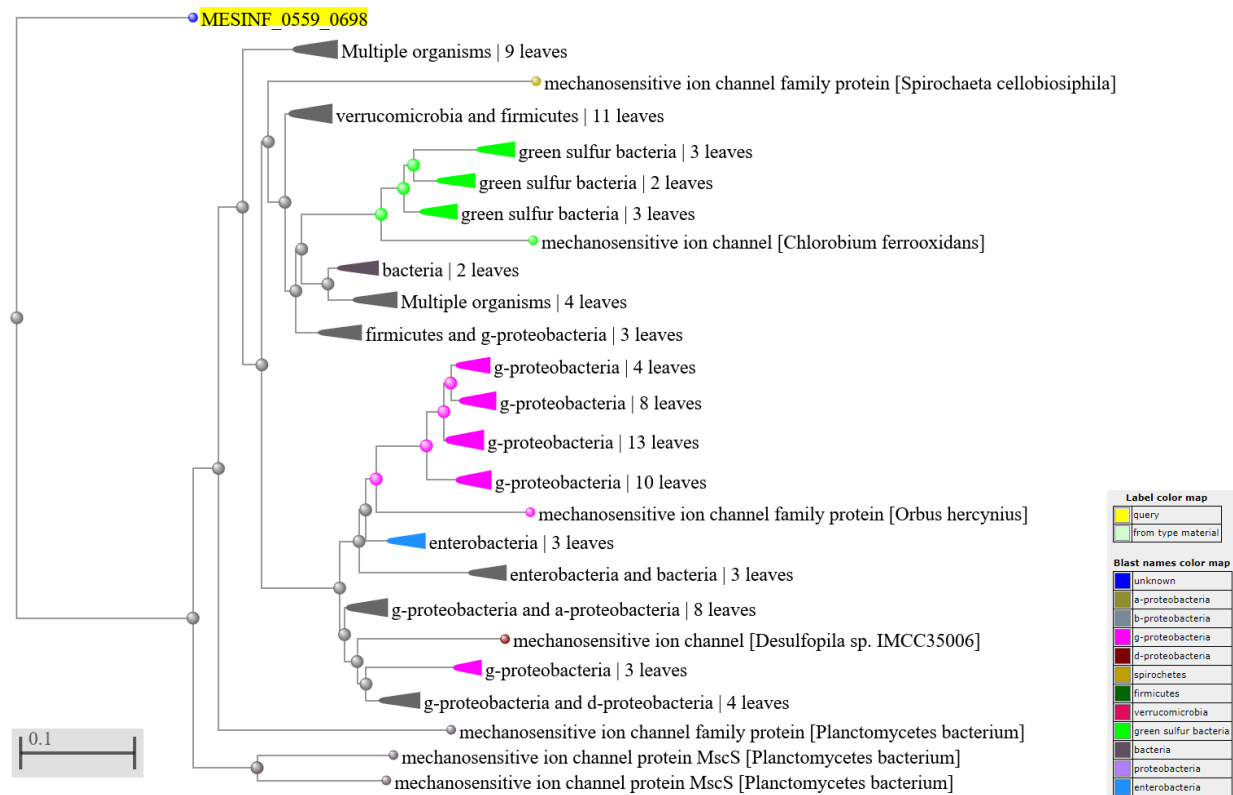
56- MESINF_0559_1204: Iron-containing alcohol dehydrogenase



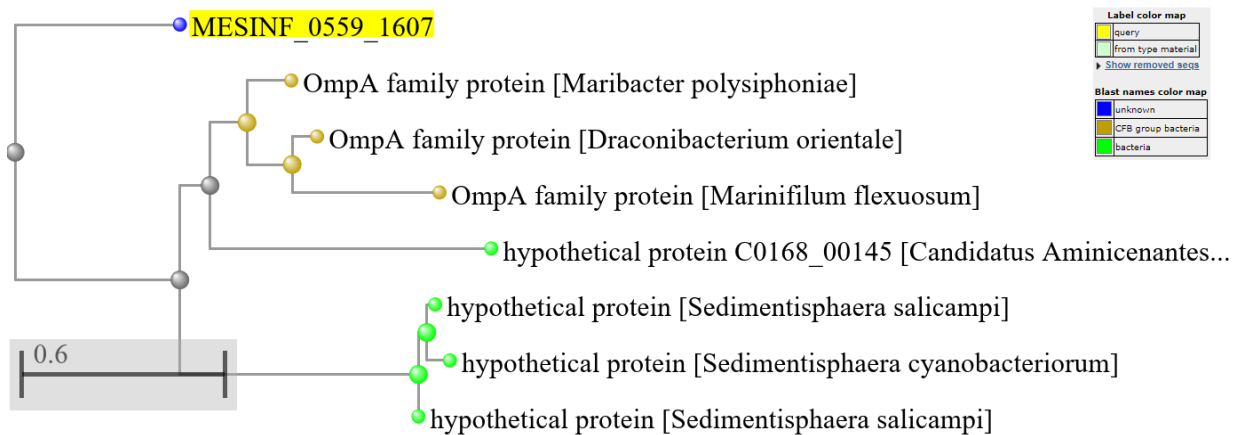
57- MESINF_0559_1870: Lyase/Listeria protein



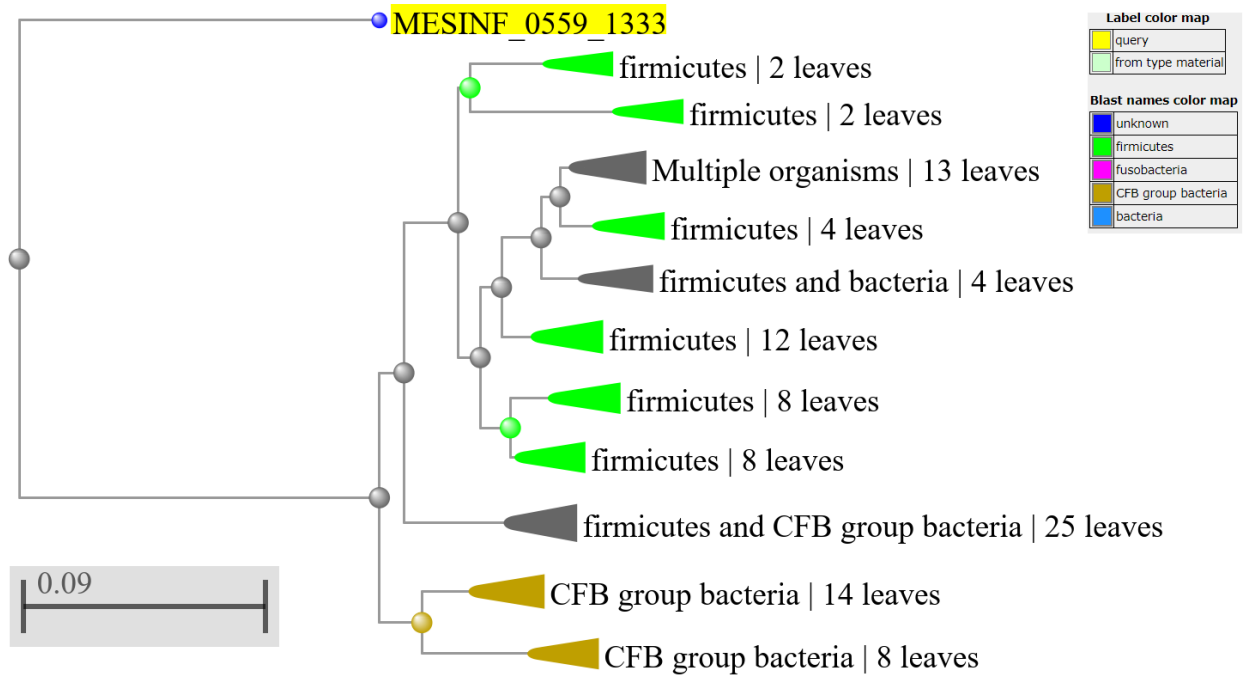
58- MESINF_0559_0698: Mechanosensitive ion channel MscS



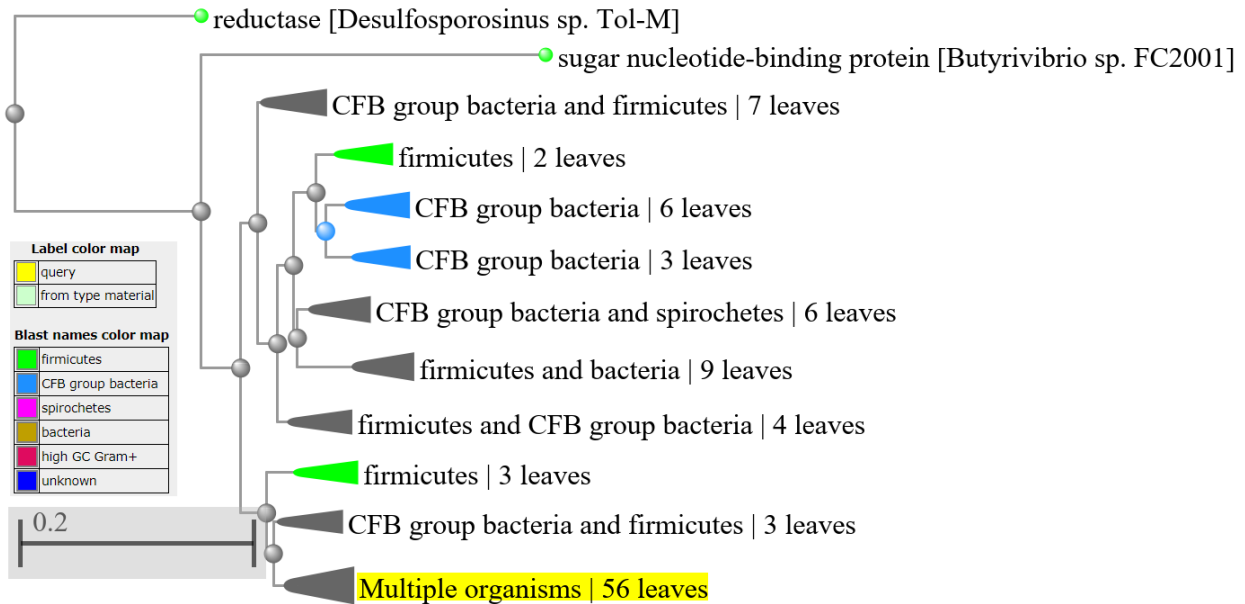
59- MESINF_0559_1607: OmpA family protein



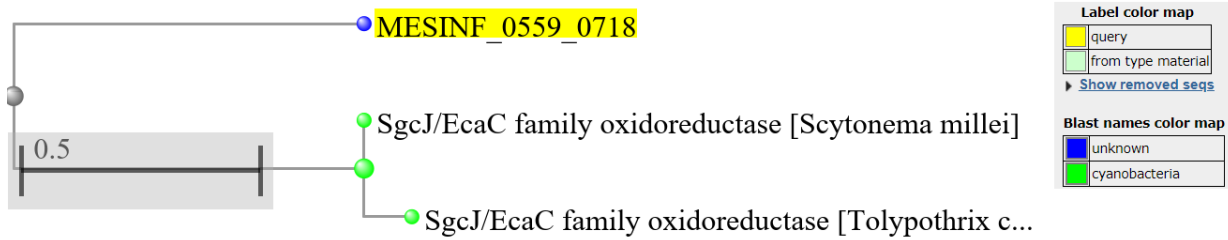
60- MESINF_0559_1333: Peptidase T



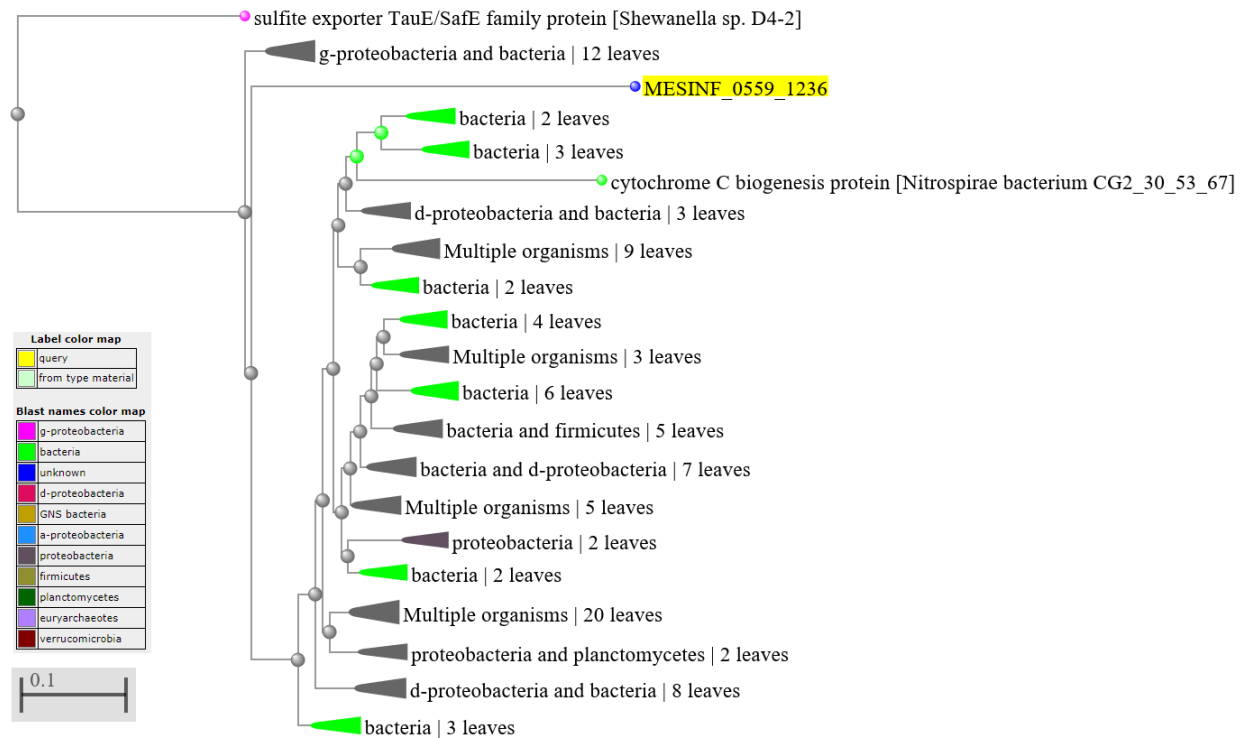
61- MESINF_0559_0677: reductase



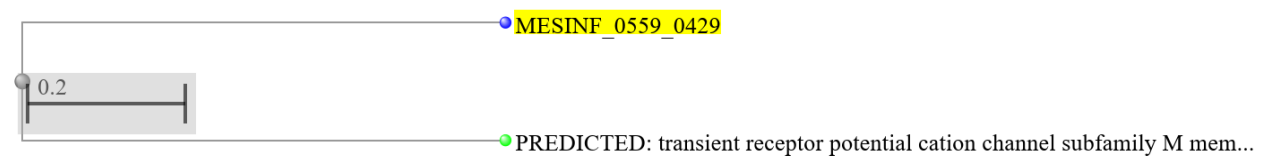
62- MESINF_0559_0718: SgcJ/Ecac family oxidoreductase



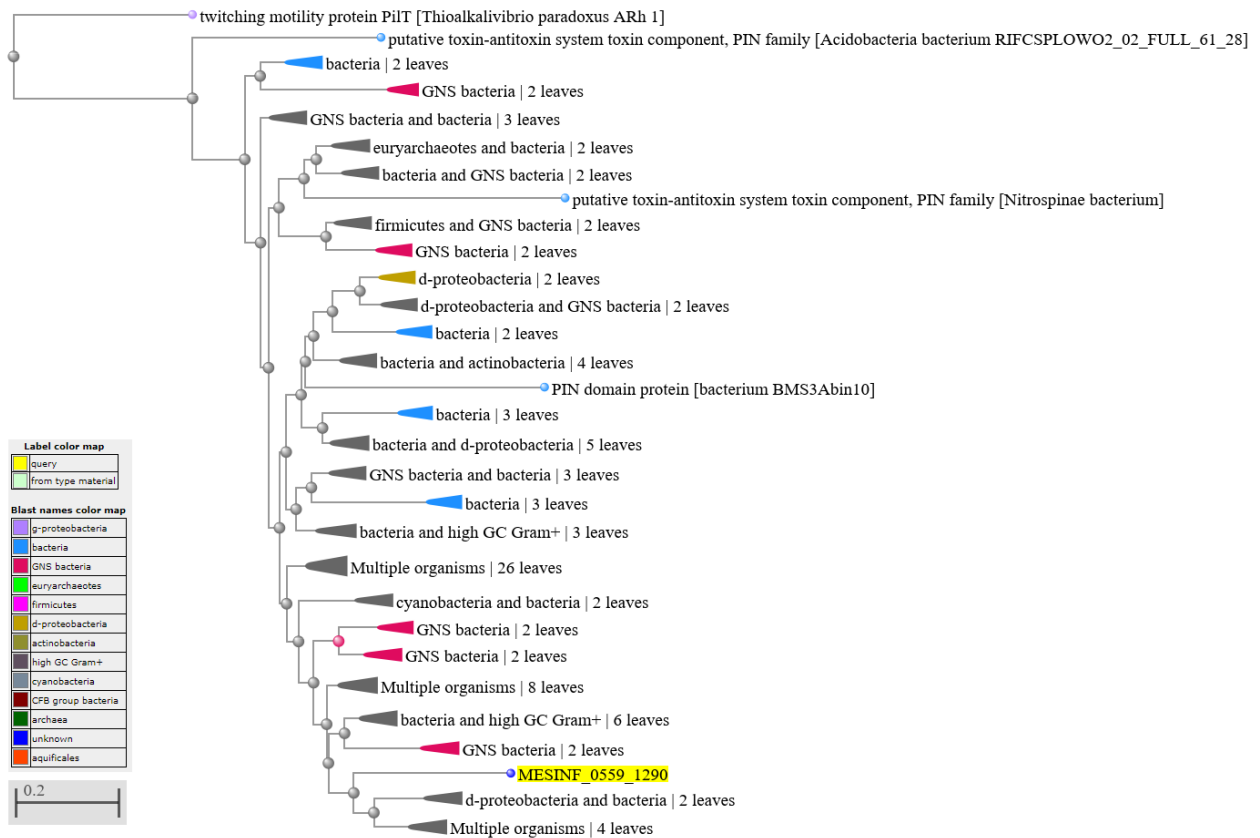
63- MESINF_0559_1236: Sulfite exporter TauE/SafE



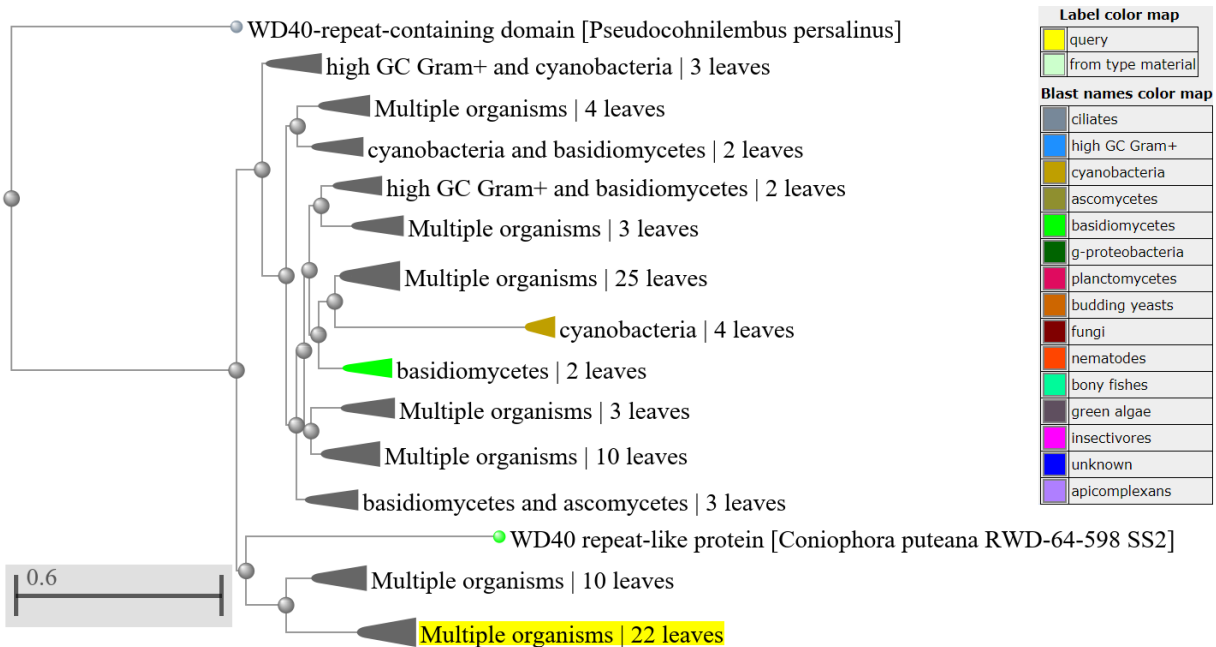
64- ESINF_0559_0429: Transient receptor potential cation channel



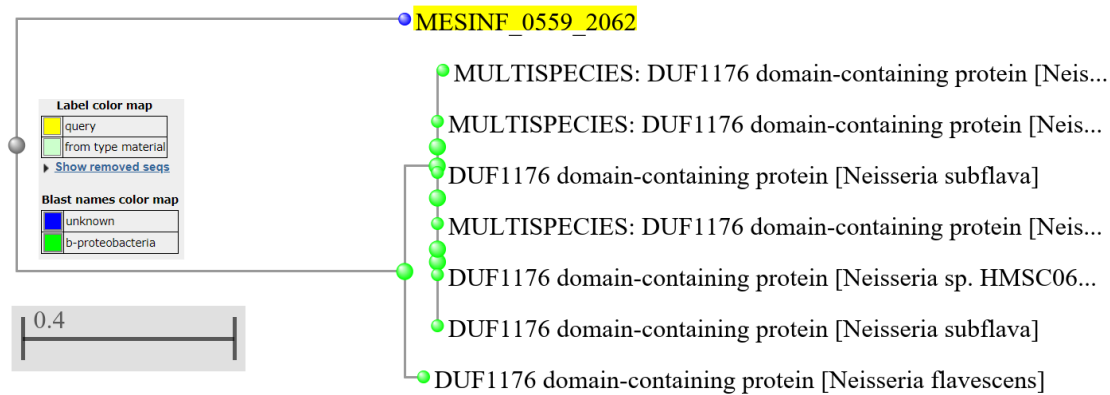
65- MESINF_0559_1290: twitching motility protein PilT



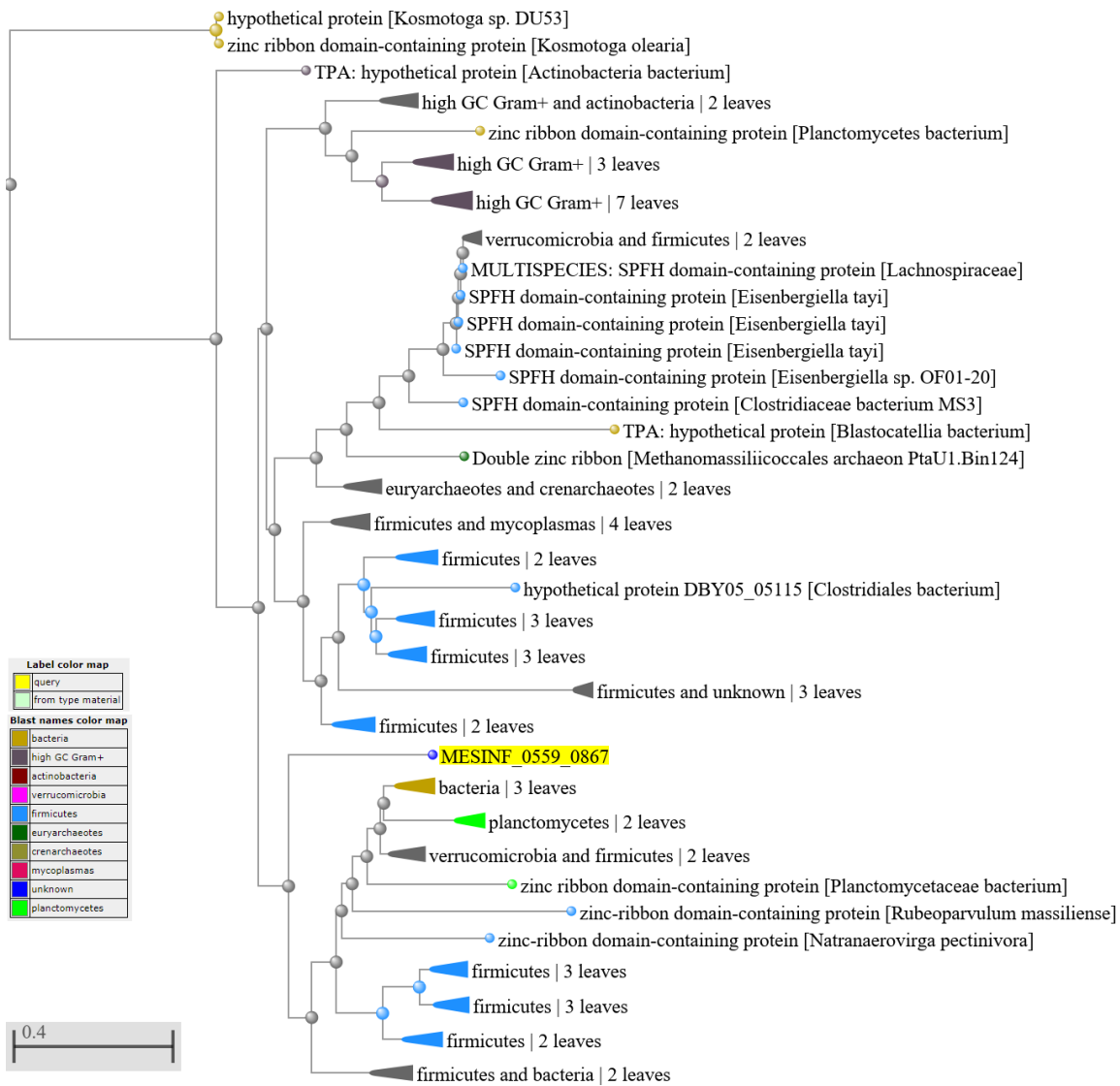
66- MESINF_0559_1129: WD40-repeat-containing domain



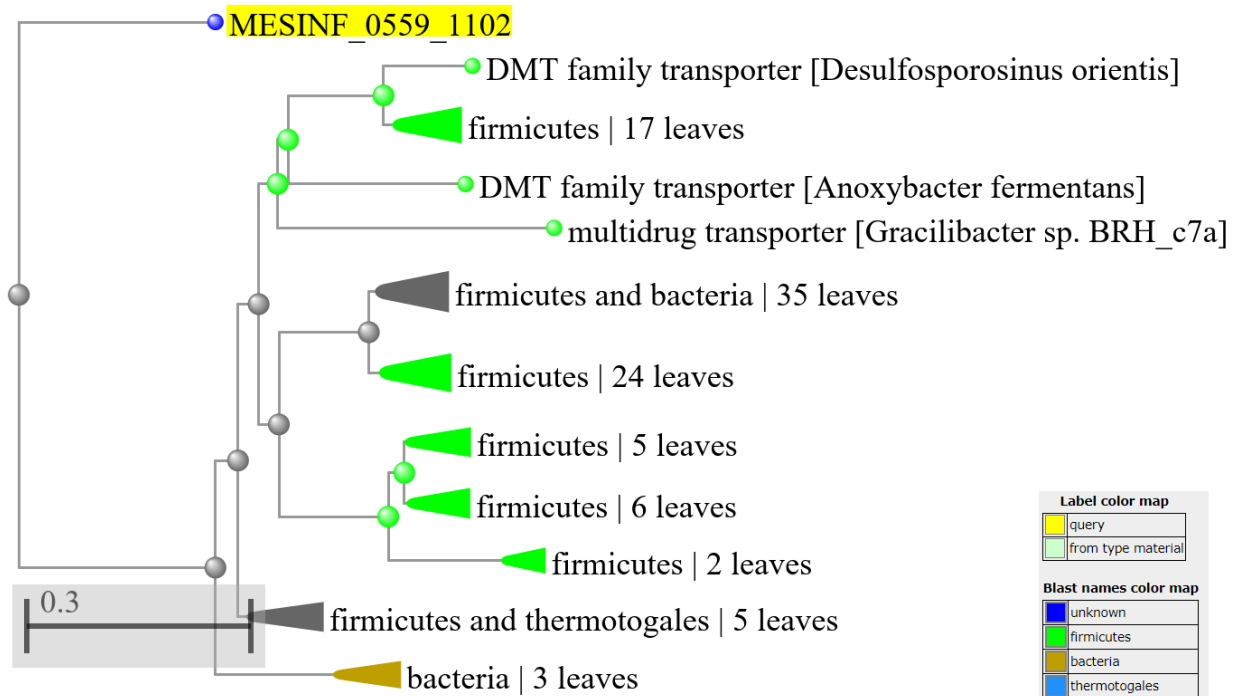
67- MESINF_0559_2062: ypfG - DUF1176 domain-containing protein



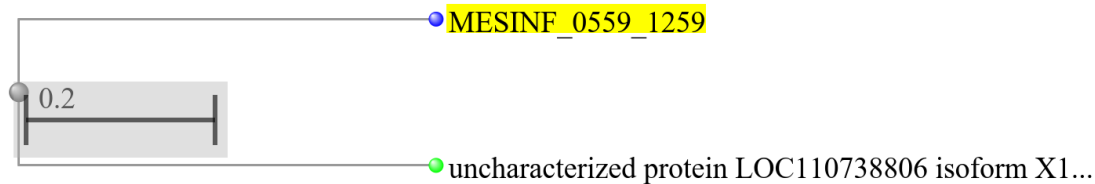
68- MESINF_0559_0867: Zinc ribbon domain containing



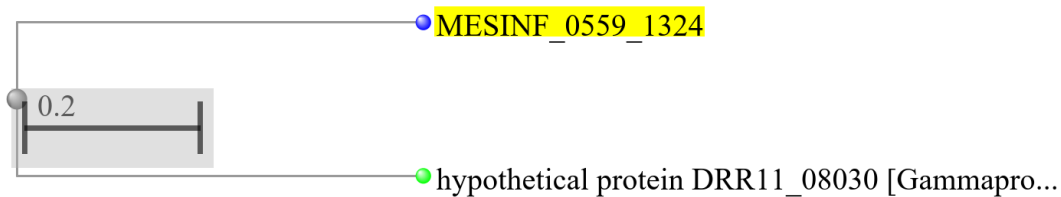
69- MESINF_0559_1102: DMT family transporter



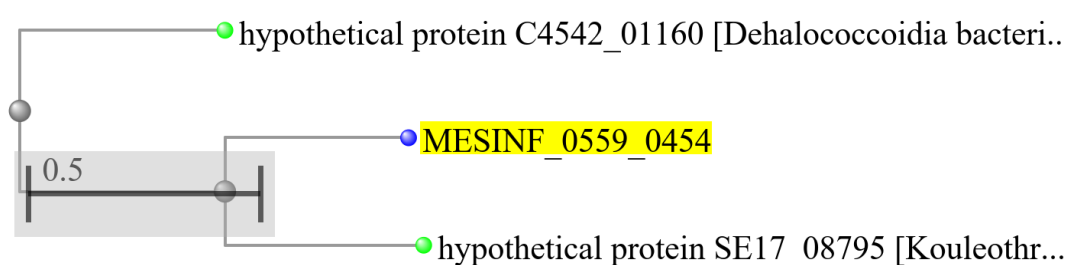
70- MESINF_0559_1259: Unknown



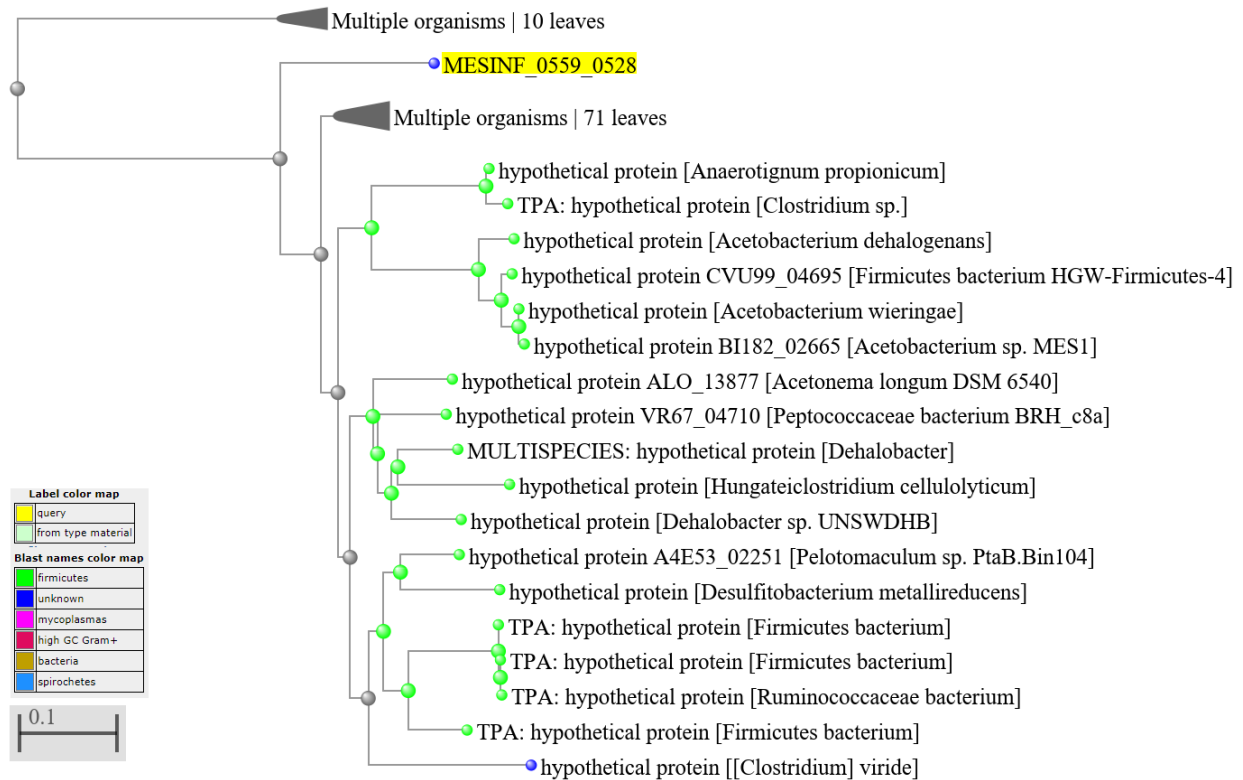
71- MESINF_0559_1324: Unknown



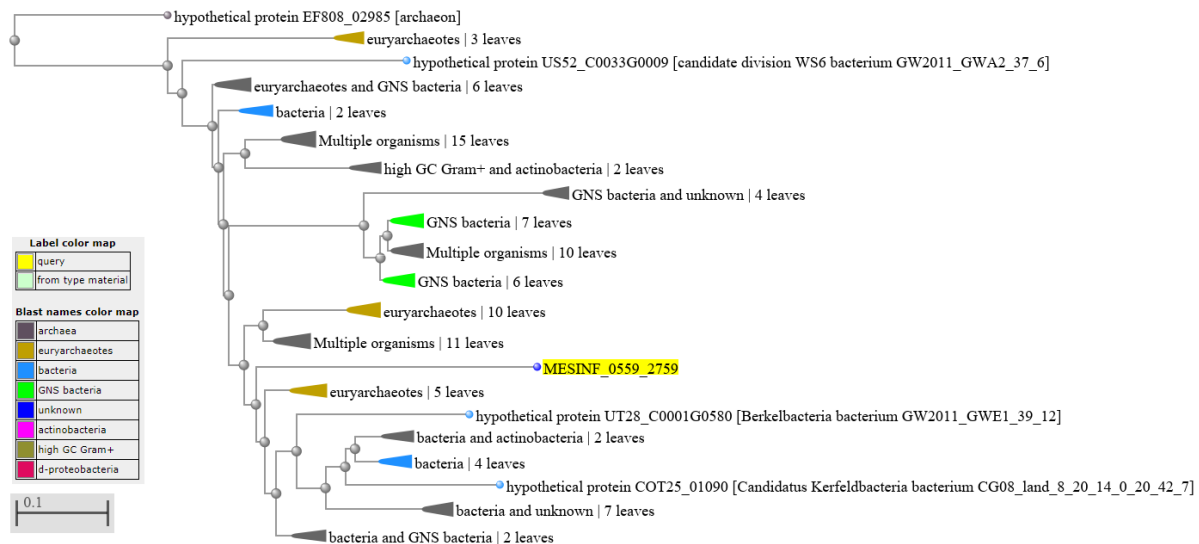
72- MESINF_0559_0454: Unknown



73- MESINF_0559_0528: Unknown



74- MESINF_0559_2759: Unknown



75- MESINF_0559_0553: Unknown

