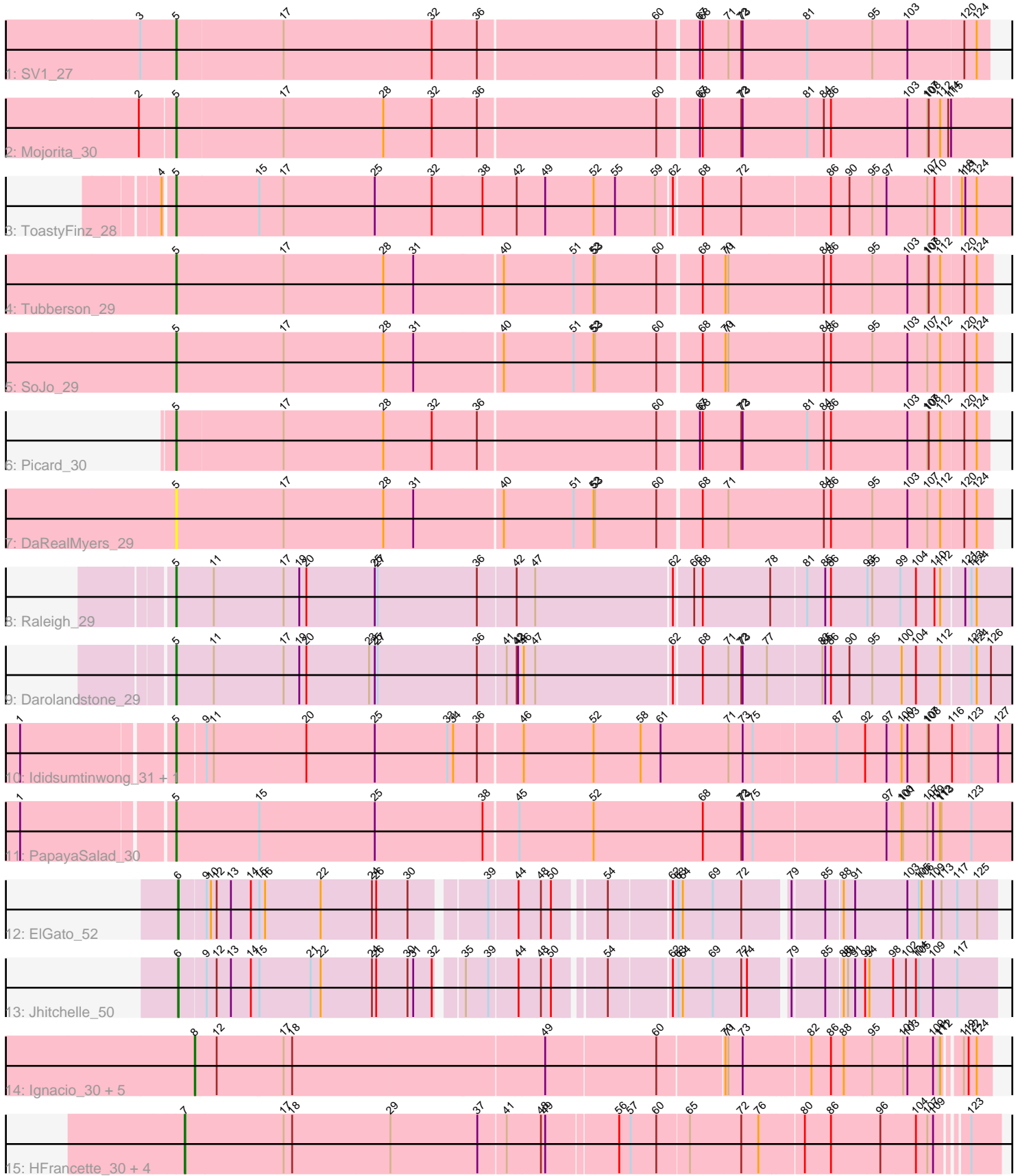


Pham 305254



Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly with annotated starts, the track will be further scaled to only show that region of the ORF with annotated starts. This action will be indicated by adding "Zoomed" to the title. For starts, yellow indicates the location of called starts comprised solely of Glimmer/GeneMark auto-annotations, green indicates the location of called starts with at least 1 manual gene annotation.

Pham 305254 Report

This analysis was run 06/08/26 on database version 649.

WARNING: Pham size does not match number of genes in report. Either unphamerated genes have been added (by you) or starterator has removed genes due to invalid start codon.

Pham number 305254 has 25 members, 1 are drafts.

Phages represented in each track:

- Track 1 : SV1_27
- Track 2 : Mojorita_30
- Track 3 : ToastyFinz_28
- Track 4 : Tubberson_29
- Track 5 : SoJo_29
- Track 6 : Picard_30
- Track 7 : DaRealMyers_29
- Track 8 : Raleigh_29
- Track 9 : Darolandstone_29
- Track 10 : Ididsumtinwong_31, Bioscum_31
- Track 11 : PapayaSalad_30
- Track 12 : ElGato_52
- Track 13 : Jhitchelle_50
- Track 14 : Ignacio_30, FrumpyGal_30, Eastland_29, AxeJC_29, Piccadilly_29, Eklok_30
- Track 15 : HFrancette_30, Schlegelian_31, ArizonaGT_30, Cumberbatch_30, Vondra_28

Summary of Final Annotations (See graph section above for start numbers):

The start number called the most often in the published annotations is 5, it was called in 11 of the 24 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Bioscum_31, DaRealMyers_29, Darolandstone_29, Ididsumtinwong_31, Mojorita_30, PapayaSalad_30, Picard_30, Raleigh_29, SV1_27, SoJo_29, ToastyFinz_28, Tubberson_29,

Genes that have the "Most Annotated" start but do not call it:

-

Genes that do not have the "Most Annotated" start:

- ArizonaGT_30, AxeJC_29, Cumberbatch_30, Eastland_29, Eklok_30, ElGato_52, FrumpyGal_30, HFrancette_30, Ignacio_30, Jhitchelle_50, Piccadilly_29, Schlegelian_31, Vondra_28,

Summary by start number:

Start 5:

- Found in 12 of 25 (48.0%) of genes in pham
- Manual Annotations of this start: 11 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Bioscum_31 (BC3), DaRealMyers_29 (BC1), Darolandstone_29 (BC2), Ididsumtinwong_31 (BC3), Moajorita_30 (BC1), PapayaSalad_30 (BC3), Picard_30 (BC1), Raleigh_29 (BC2), SV1_27 (BC1), SoJo_29 (BC1), ToastyFinz_28 (BC1), Tubberson_29 (BC1),

Start 6:

- Found in 2 of 25 (8.0%) of genes in pham
- Manual Annotations of this start: 2 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ElGato_52 (BD3), Jhitchelle_50 (BD3),

Start 7:

- Found in 5 of 25 (20.0%) of genes in pham
- Manual Annotations of this start: 5 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: ArizonaGT_30 (BP), Cumberbatch_30 (BP), HFrancette_30 (BP), Schlegelian_31 (BP), Vondra_28 (BP),

Start 8:

- Found in 6 of 25 (24.0%) of genes in pham
- Manual Annotations of this start: 6 of 24
- Called 100.0% of time when present
- Phage (with cluster) where this start called: AxeJC_29 (BP), Eastland_29 (BP), Eklok_30 (BP), FrumpyGal_30 (BP), Ignacio_30 (BP), Piccadilly_29 (BP),

Summary by clusters:

There are 5 clusters represented in this pham: BC2, BP, BC1, BD3, BC3,

Info for manual annotations of cluster BC1:

- Start number 5 was manually annotated 6 times for cluster BC1.

Info for manual annotations of cluster BC2:

- Start number 5 was manually annotated 2 times for cluster BC2.

Info for manual annotations of cluster BC3:

- Start number 5 was manually annotated 3 times for cluster BC3.

Info for manual annotations of cluster BD3:

- Start number 6 was manually annotated 2 times for cluster BD3.

Info for manual annotations of cluster BP:

- Start number 7 was manually annotated 5 times for cluster BP.
- Start number 8 was manually annotated 6 times for cluster BP.

Gene Information:

Gene: ArizonaGT_30 Start: 22964, Stop: 21345, Start Num: 7

Candidate Starts for ArizonaGT_30:

(Start: 7 @22964 has 5 MA's), (17, 22760), (18, 22742), (29, 22538), (37, 22355), (41, 22304), (48, 22238), (49, 22229), (56, 22088), (57, 22064), (60, 22010), (65, 21944), (72, 21839), (76, 21803), (80, 21716), (86, 21662), (96, 21560), (104, 21491), (107, 21467), (109, 21455), (123, 21404),

Gene: AxeJC_29 Start: 22952, Stop: 21372, Start Num: 8

Candidate Starts for AxeJC_29:

(Start: 8 @22952 has 6 MA's), (12, 22907), (17, 22772), (18, 22754), (49, 22241), (60, 22013), (70, 21884), (71, 21878), (73, 21848), (82, 21716), (86, 21677), (88, 21650), (95, 21593), (101, 21533), (103, 21524), (109, 21470), (111, 21458), (112, 21455), (119, 21425), (122, 21416), (124, 21401),

Gene: Bioscum_31 Start: 23000, Stop: 21264, Start Num: 5

Candidate Starts for Bioscum_31:

(1, 23297), (Start: 5 @23000 has 11 MA's), (9, 22943), (11, 22928), (20, 22736), (25, 22595), (33, 22445), (34, 22433), (36, 22385), (46, 22295), (52, 22151), (58, 22052), (61, 22010), (71, 21869), (73, 21839), (75, 21818), (87, 21653), (92, 21593), (97, 21551), (100, 21521), (103, 21509), (107, 21467), (108, 21464), (116, 21422), (123, 21386), (127, 21332),

Gene: Cumberbatch_30 Start: 22964, Stop: 21345, Start Num: 7

Candidate Starts for Cumberbatch_30:

(Start: 7 @22964 has 5 MA's), (17, 22760), (18, 22742), (29, 22538), (37, 22355), (41, 22304), (48, 22238), (49, 22229), (56, 22088), (57, 22064), (60, 22010), (65, 21944), (72, 21839), (76, 21803), (80, 21716), (86, 21662), (96, 21560), (104, 21491), (107, 21467), (109, 21455), (123, 21404),

Gene: DaRealMyers_29 Start: 24708, Stop: 23053, Start Num: 5

Candidate Starts for DaRealMyers_29:

(Start: 5 @24708 has 11 MA's), (17, 24489), (28, 24282), (31, 24222), (40, 24042), (51, 23898), (52, 23859), (53, 23856), (60, 23727), (68, 23643), (71, 23589), (84, 23391), (86, 23376), (95, 23292), (103, 23223), (107, 23181), (112, 23154), (120, 23109), (124, 23085),

Gene: Darolandstone_29 Start: 24567, Stop: 22855, Start Num: 5

Candidate Starts for Darolandstone_29:

(Start: 5 @24567 has 11 MA's), (11, 24492), (17, 24351), (19, 24318), (20, 24303), (23, 24174), (25, 24162), (27, 24156), (36, 23952), (41, 23895), (42, 23874), (43, 23871), (46, 23859), (47, 23838), (62, 23559), (68, 23505), (71, 23451), (72, 23424), (73, 23421), (77, 23370), (83, 23262), (85, 23256), (86, 23244), (90, 23205), (95, 23160), (100, 23103), (104, 23073), (112, 23022), (123, 22968), (124, 22959), (126, 22929),

Gene: Eastland_29 Start: 22937, Stop: 21357, Start Num: 8

Candidate Starts for Eastland_29:

(Start: 8 @22937 has 6 MA's), (12, 22892), (17, 22757), (18, 22739), (49, 22226), (60, 21998), (70, 21869), (71, 21863), (73, 21833), (82, 21701), (86, 21662), (88, 21635), (95, 21578), (101, 21518), (103, 21509), (109, 21455), (111, 21443), (112, 21440), (119, 21410), (122, 21401), (124, 21386),

Gene: Eklok_30 Start: 22952, Stop: 21372, Start Num: 8

Candidate Starts for Eklok_30:

(Start: 8 @22952 has 6 MA's), (12, 22907), (17, 22772), (18, 22754), (49, 22241), (60, 22013), (70, 21884), (71, 21878), (73, 21848), (82, 21716), (86, 21677), (88, 21650), (95, 21593), (101, 21533), (103, 21524), (109, 21470), (111, 21458), (112, 21455), (119, 21425), (122, 21416), (124, 21401),

Gene: ElGato_52 Start: 36418, Stop: 38001, Start Num: 6

Candidate Starts for ElGato_52:

(Start: 6 @36418 has 2 MA's), (9, 36472), (10, 36481), (12, 36493), (13, 36523), (14, 36565), (15, 36580), (16, 36592), (22, 36709), (24, 36817), (26, 36826), (30, 36889), (39, 37024), (44, 37081), (48, 37123), (50, 37144), (54, 37237), (62, 37360), (63, 37369), (64, 37378), (69, 37441), (72, 37501), (79, 37588), (85, 37648), (88, 37681), (91, 37705), (103, 37813), (105, 37837), (106, 37843), (109, 37867), (113, 37885), (117, 37918), (125, 37960),

Gene: FrumpyGal_30 Start: 22937, Stop: 21357, Start Num: 8

Candidate Starts for FrumpyGal_30:

(Start: 8 @22937 has 6 MA's), (12, 22892), (17, 22757), (18, 22739), (49, 22226), (60, 21998), (70, 21869), (71, 21863), (73, 21833), (82, 21701), (86, 21662), (88, 21635), (95, 21578), (101, 21518), (103, 21509), (109, 21455), (111, 21443), (112, 21440), (119, 21410), (122, 21401), (124, 21386),

Gene: HFrancette_30 Start: 23607, Stop: 21988, Start Num: 7

Candidate Starts for HFrancette_30:

(Start: 7 @23607 has 5 MA's), (17, 23403), (18, 23385), (29, 23181), (37, 22998), (41, 22947), (48, 22881), (49, 22872), (56, 22731), (57, 22707), (60, 22653), (65, 22587), (72, 22482), (76, 22446), (80, 22359), (86, 22305), (96, 22203), (104, 22134), (107, 22110), (109, 22098), (123, 22047),

Gene: Ididsumtinwong_31 Start: 23000, Stop: 21264, Start Num: 5

Candidate Starts for Ididsumtinwong_31:

(1, 23297), (Start: 5 @23000 has 11 MA's), (9, 22943), (11, 22928), (20, 22736), (25, 22595), (33, 22445), (34, 22433), (36, 22385), (46, 22295), (52, 22151), (58, 22052), (61, 22010), (71, 21869), (73, 21839), (75, 21818), (87, 21653), (92, 21593), (97, 21551), (100, 21521), (103, 21509), (107, 21467), (108, 21464), (116, 21422), (123, 21386), (127, 21332),

Gene: Ignacio_30 Start: 23614, Stop: 22034, Start Num: 8

Candidate Starts for Ignacio_30:

(Start: 8 @23614 has 6 MA's), (12, 23569), (17, 23434), (18, 23416), (49, 22903), (60, 22675), (70, 22546), (71, 22540), (73, 22510), (82, 22378), (86, 22339), (88, 22312), (95, 22255), (101, 22195), (103, 22186), (109, 22132), (111, 22120), (112, 22117), (119, 22087), (122, 22078), (124, 22063),

Gene: Jhitchelle_50 Start: 36343, Stop: 37926, Start Num: 6

Candidate Starts for Jhitchelle_50:

(Start: 6 @36343 has 2 MA's), (9, 36397), (12, 36418), (13, 36448), (14, 36490), (15, 36505), (21, 36613), (22, 36634), (24, 36742), (26, 36751), (30, 36814), (31, 36826), (32, 36865), (35, 36907), (39, 36949), (44, 37006), (48, 37048), (50, 37069), (54, 37162), (62, 37285), (63, 37294), (64, 37303), (69, 37366), (72, 37426), (74, 37438), (79, 37513), (85, 37573), (88, 37606), (89, 37615), (91, 37630), (92, 37651), (94, 37660), (98, 37708), (102, 37735), (104, 37756), (105, 37762), (109, 37792), (117, 37843),

Gene: Mojarita_30 Start: 23368, Stop: 21647, Start Num: 5

Candidate Starts for Mojarita_30:

(2, 23440), (Start: 5 @23368 has 11 MA's), (17, 23155), (28, 22948), (32, 22849), (36, 22756), (60, 22393), (67, 22315), (68, 22309), (72, 22228), (73, 22225), (81, 22090), (84, 22057), (86, 22042), (103, 21889), (107, 21847), (108, 21844), (112, 21820), (114, 21805), (115, 21799),

Gene: PapayaSalad_30 Start: 23309, Stop: 21576, Start Num: 5

Candidate Starts for PapayaSalad_30:

(1, 23606), (Start: 5 @23309 has 11 MA's), (15, 23135), (25, 22898), (38, 22676), (45, 22607), (52, 22457), (68, 22229), (72, 22148), (73, 22145), (75, 22124), (97, 21857), (100, 21827), (101, 21824), (107, 21773), (109, 21761), (112, 21746), (113, 21743), (123, 21683),

Gene: Picard_30 Start: 23566, Stop: 21923, Start Num: 5

Candidate Starts for Picard_30:

(Start: 5 @23566 has 11 MA's), (17, 23353), (28, 23146), (32, 23047), (36, 22954), (60, 22591), (67, 22513), (68, 22507), (72, 22426), (73, 22423), (81, 22288), (84, 22255), (86, 22240), (103, 22087), (107, 22045), (108, 22042), (112, 22018), (120, 21973), (124, 21949),

Gene: Piccadilly_29 Start: 22936, Stop: 21356, Start Num: 8

Candidate Starts for Piccadilly_29:

(Start: 8 @22936 has 6 MA's), (12, 22891), (17, 22756), (18, 22738), (49, 22225), (60, 21997), (70, 21868), (71, 21862), (73, 21832), (82, 21700), (86, 21661), (88, 21634), (95, 21577), (101, 21517), (103, 21508), (109, 21454), (111, 21442), (112, 21439), (119, 21409), (122, 21400), (124, 21385),

Gene: Raleigh_29 Start: 25082, Stop: 23370, Start Num: 5

Candidate Starts for Raleigh_29:

(Start: 5 @25082 has 11 MA's), (11, 25007), (17, 24866), (19, 24833), (20, 24818), (25, 24677), (27, 24671), (36, 24467), (42, 24389), (47, 24353), (62, 24074), (66, 24038), (68, 24020), (78, 23879), (81, 23807), (85, 23771), (86, 23759), (93, 23684), (95, 23675), (99, 23621), (104, 23588), (110, 23549), (112, 23537), (121, 23495), (123, 23483), (124, 23474),

Gene: SV1_27 Start: 22294, Stop: 20651, Start Num: 5

Candidate Starts for SV1_27:

(3, 22366), (Start: 5 @22294 has 11 MA's), (17, 22081), (32, 21775), (36, 21682), (60, 21319), (67, 21241), (68, 21235), (71, 21181), (72, 21154), (73, 21151), (81, 21016), (95, 20884), (103, 20815), (120, 20701), (124, 20677),

Gene: Schlegelian_31 Start: 23332, Stop: 21713, Start Num: 7

Candidate Starts for Schlegelian_31:

(Start: 7 @23332 has 5 MA's), (17, 23128), (18, 23110), (29, 22906), (37, 22723), (41, 22672), (48, 22606), (49, 22597), (56, 22456), (57, 22432), (60, 22378), (65, 22312), (72, 22207), (76, 22171), (80, 22084), (86, 22030), (96, 21928), (104, 21859), (107, 21835), (109, 21823), (123, 21772),

Gene: SoJo_29 Start: 24703, Stop: 23048, Start Num: 5

Candidate Starts for SoJo_29:

(Start: 5 @24703 has 11 MA's), (17, 24484), (28, 24277), (31, 24217), (40, 24037), (51, 23893), (52, 23854), (53, 23851), (60, 23722), (68, 23638), (70, 23590), (71, 23584), (84, 23386), (86, 23371), (95, 23287), (103, 23218), (107, 23176), (112, 23149), (120, 23104), (124, 23080),

Gene: ToastyFinz_28 Start: 24644, Stop: 22878, Start Num: 5

Candidate Starts for ToastyFinz_28:

(4, 24662), (Start: 5 @24644 has 11 MA's), (15, 24473), (17, 24425), (25, 24236), (32, 24119), (38, 24014), (42, 23942), (49, 23885), (52, 23783), (55, 23738), (59, 23654), (62, 23624), (68, 23570), (72, 23489), (86, 23309), (90, 23270), (95, 23225), (97, 23198), (107, 23114), (110, 23099), (118, 23051), (121, 23045), (124, 23024),

Gene: Tubberson_29 Start: 24708, Stop: 23053, Start Num: 5

Candidate Starts for Tubberson_29:

(Start: 5 @24708 has 11 MA's), (17, 24489), (28, 24282), (31, 24222), (40, 24042), (51, 23898), (52, 23859), (53, 23856), (60, 23727), (68, 23643), (70, 23595), (71, 23589), (84, 23391), (86, 23376), (95, 23292), (103, 23223), (107, 23181), (108, 23178), (112, 23154), (120, 23109), (124, 23085),

Gene: Vondra_28 Start: 22771, Stop: 21152, Start Num: 7

Candidate Starts for Vondra_28:

(Start: 7 @22771 has 5 MA's), (17, 22567), (18, 22549), (29, 22345), (37, 22162), (41, 22111), (48, 22045), (49, 22036), (56, 21895), (57, 21871), (60, 21817), (65, 21751), (72, 21646), (76, 21610), (80, 21523), (86, 21469), (96, 21367), (104, 21298), (107, 21274), (109, 21262), (123, 21211),