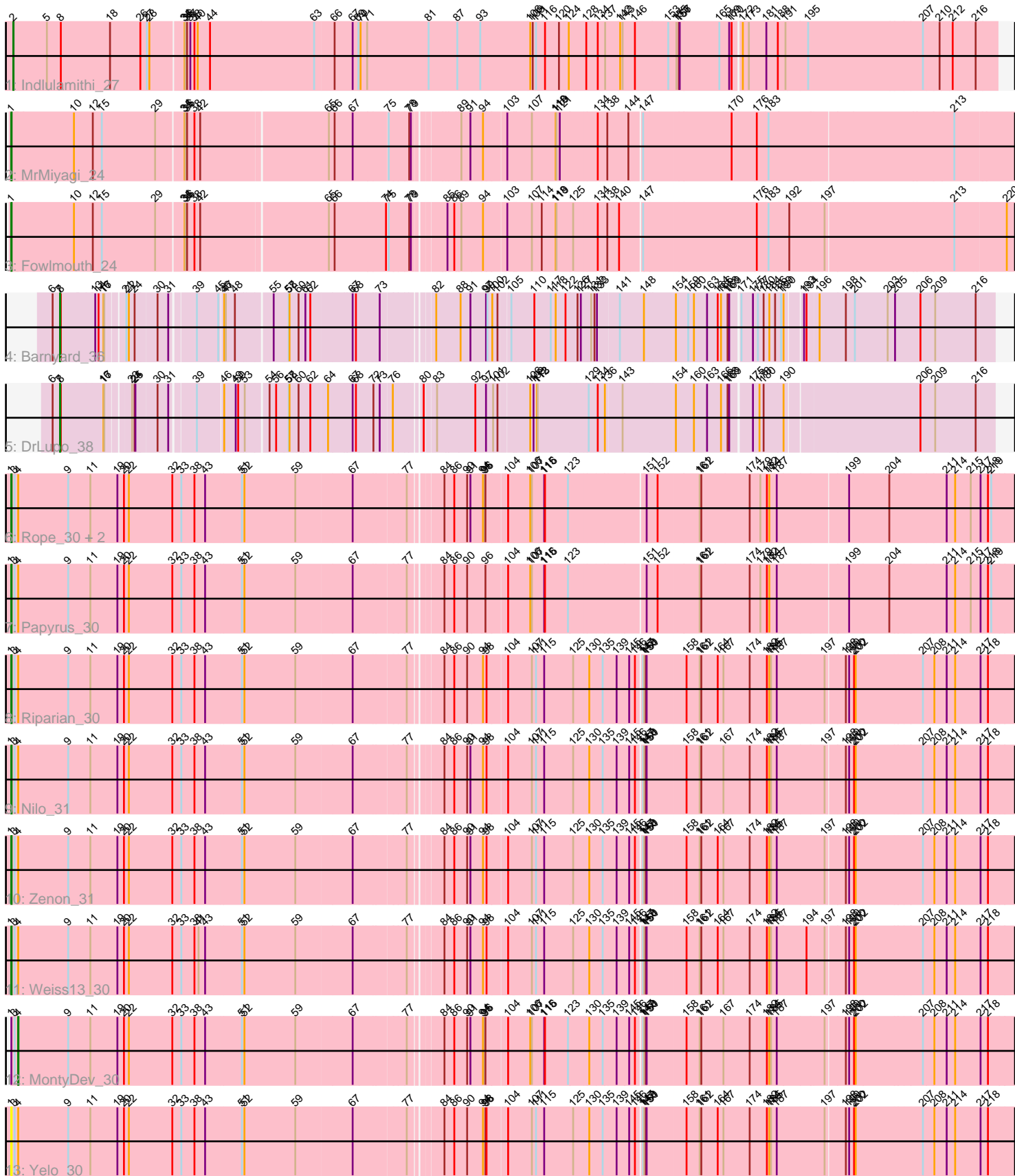# Pham 171857

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 171857 Report

This analysis was run 07/10/24 on database version 566.

Pham number 171857 has 15 members, 1 are drafts.

Phages represented in each track:
• Track 1 : Indlulamithi_27
• Track 2 : MrMiyagi_24
• Track 3 : Fowlmouth_24
• Track 4 : Barnyard_36
• Track 5 : DrLupo_38
• Track 6 : Rope_30, Candle_30, Send513_30
• Track 7 : Papyrus_30
• Track 8 : Riparian_30
• Track 9 : Nilo_31
• Track 10 : Zenon_31
• Track 11 : Weiss13_30
• Track 12 : MontyDev_30
• Track 13 : Yelo_30

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

The start number called the most often in the published annotations is 1, it was called in 10 of the 14 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Candle_30, Fowlmouth_24, MrMiyagi_24, Nilo_31, Papyrus_30, Riparian_30, Rope_30, Send513_30, Weiss13_30, Yelo_30, Zenon_31,

Genes that have the "Most Annotated" start but do not call it:
• MontyDev_30,

Genes that do not have the "Most Annotated" start:
• Barnyard_36, DrLupo_38, Indlulamithi_27,

Summary by start number:

Start 1:
• Found in 12 of 15 (80.0%) of genes in pham
• Manual Annotations of this start: 10 of 14

• Called 91.7% of time when present
• Phage (with cluster) where this start called: Candle_30 (R), Fowlmouth_24 (AC), MrMiyagi_24 (AC), Nilo_31 (R), Papyrus_30 (R), Riparian_30 (R), Rope_30 (R), Send513_30 (R), Weiss13_30 (R), Yelo_30 (R), Zenon_31 (R),

Start 2:
• Found in 1 of 15 (6.7%) of genes in pham
• Manual Annotations of this start: 1 of 14
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Indlulamithi_27 (AC),

Start 4:
• Found in 10 of 15 (66.7%) of genes in pham
• Manual Annotations of this start: 1 of 14
• Called 10.0% of time when present
• Phage (with cluster) where this start called: MontyDev_30 (R),

Start 7:
• Found in 2 of 15 (13.3%) of genes in pham
• Manual Annotations of this start: 2 of 14
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Barnyard_36 (H2), DrLupo_38 (H2),

Summary by clusters:

There are 3 clusters represented in this pham: H2, AC, R,

Info for manual annotations of cluster AC:
•Start number 1 was manually annotated 2 times for cluster AC.
•Start number 2 was manually annotated 1 time for cluster AC.

Info for manual annotations of cluster H2:
•Start number 7 was manually annotated 2 times for cluster H2.

Info for manual annotations of cluster R:
•Start number 1 was manually annotated 8 times for cluster R.
•Start number 4 was manually annotated 1 time for cluster R.

Gene Information:

Gene: Barnyard_36 Start: 26772, Stop: 29858, Start Num: 7
Candidate Starts for Barnyard_36:
(6, 26745), (Start: 7 @26772 has 2 MA's), (8, 26775), (13, 26895), (14, 26907), (16, 26925), (17, 26928), (21, 26982), (22, 26991), (24, 27012), (30, 27084), (31, 27120), (39, 27195), (45, 27273), (46, 27282), (47, 27288), (48, 27315), (55, 27432), (57, 27483), (58, 27486), (60, 27516), (61, 27540), (62, 27558), (67, 27690), (68, 27702), (73, 27783), (82, 27933), (88, 28017), (91, 28053), (97, 28107), (99, 28110), (100, 28128), (102, 28146), (105, 28182), (110, 28263), (117, 28323), (118, 28341), (122, 28377), (126, 28419), (127, 28431), (131, 28461), (132, 28473), (133, 28482), (141, 28557), (148, 28644), (154, 28752), (159, 28797), (160, 28818), (163, 28866), (164, 28905), (166, 28917), (168, 28941), (169, 28947), (171, 28977), (175, 29019), (177, 29037), (180, 29058), (184, 29079), (186, 29100), (189, 29118), (190, 29127), (193, 29181), (194, 29190), (196, 29232), (198, 29325), (201,

29358), (203, 29478), (205, 29505), (206, 29598), (209, 29652), (216, 29796),

Gene: Candle_30 Start: 24637, Stop: 28131, Start Num: 1
Candidate Starts for Candle_30:
(Start: 1 @24637 has 10 MA's), (3, 24649), (Start: 4 @24661 has 1 MA's), (9, 24844), (11, 24925),
(19, 25024), (20, 25048), (22, 25066), (32, 25225), (33, 25258), (38, 25306), (43, 25345), (51, 25471),
(52, 25480), (59, 25666), (67, 25867), (77, 26044), (84, 26143), (86, 26176), (90, 26221), (91, 26233),
(94, 26275), (95, 26281), (96, 26284), (104, 26353), (106, 26431), (107, 26437), (115, 26482), (116,
26485), (123, 26569), (151, 26824), (152, 26863), (161, 27010), (162, 27016), (174, 27190), (179,
27223), (182, 27244), (184, 27253), (187, 27280), (199, 27523), (204, 27667), (211, 27865), (214,
27895), (215, 27952), (217, 27988), (218, 28015), (219, 28027),

Gene: DrLupo_38 Start: 27172, Stop: 30258, Start Num: 7
Candidate Starts for DrLupo_38:
(6, 27145), (Start: 7 @27172 has 2 MA's), (8, 27175), (16, 27325), (17, 27328), (23, 27403), (24,
27412), (25, 27415), (30, 27484), (31, 27520), (39, 27595), (46, 27682), (49, 27718), (50, 27727), (53,
27748), (54, 27817), (56, 27841), (57, 27883), (58, 27886), (60, 27916), (62, 27958), (64, 28009), (67,
28090), (68, 28102), (72, 28162), (73, 28183), (76, 28222), (80, 28303), (83, 28336), (92, 28468), (97,
28507), (101, 28531), (102, 28546), (106, 28648), (109, 28660), (112, 28672), (113, 28675), (129,
28852), (134, 28885), (136, 28909), (143, 28966), (154, 29152), (160, 29218), (163, 29266), (166,
29317), (168, 29341), (169, 29347), (175, 29419), (178, 29443), (180, 29458), (190, 29527), (206,
29998), (209, 30052), (216, 30196),

Gene: Fowlmouth_24 Start: 20553, Stop: 24044, Start Num: 1
Candidate Starts for Fowlmouth_24:
(Start: 1 @20553 has 10 MA's), (10, 20778), (12, 20847), (15, 20880), (29, 21075), (34, 21171), (35,
21174), (36, 21180), (38, 21207), (42, 21225), (65, 21675), (66, 21696), (74, 21879), (75, 21882), (78,
21951), (79, 21957), (85, 22053), (86, 22077), (89, 22101), (94, 22176), (103, 22251), (107, 22338),
(114, 22374), (118, 22425), (119, 22428), (125, 22488), (134, 22566), (138, 22599), (140, 22638),
(147, 22710), (176, 23100), (183, 23136), (192, 23211), (197, 23334), (213, 23790), (220, 23973),

Gene: Indlulamithi_27 Start: 22936, Stop: 26442, Start Num: 2
Candidate Starts for Indlulamithi_27:
(Start: 2 @22936 has 1 MA's), (5, 23059), (8, 23110), (18, 23290), (26, 23401), (27, 23425), (28,
23434), (34, 23551), (35, 23554), (36, 23560), (37, 23572), (38, 23587), (40, 23596), (44, 23641), (63,
24019), (66, 24088), (67, 24154), (69, 24175), (70, 24181), (71, 24205), (81, 24430), (87, 24535), (93,
24619), (106, 24799), (108, 24808), (111, 24820), (116, 24853), (120, 24904), (124, 24940), (128,
25003), (134, 25045), (137, 25072), (142, 25126), (143, 25135), (146, 25180), (153, 25300), (155,
25330), (156, 25339), (157, 25342), (165, 25486), (169, 25522), (170, 25531), (172, 25558), (173,
25579), (181, 25639), (188, 25678), (191, 25702), (195, 25780), (207, 26194), (210, 26251), (212,
26293), (216, 26371),

Gene: MontyDev_30 Start: 24302, Stop: 27778, Start Num: 4
Candidate Starts for MontyDev_30:
(Start: 1 @24278 has 10 MA's), (3, 24290), (Start: 4 @24302 has 1 MA's), (9, 24485), (11, 24566),
(19, 24665), (20, 24689), (22, 24707), (32, 24866), (33, 24899), (38, 24947), (43, 24986), (51, 25112),
(52, 25121), (59, 25307), (67, 25508), (77, 25685), (84, 25784), (86, 25817), (90, 25862), (91, 25874),
(94, 25916), (95, 25922), (96, 25925), (104, 25994), (106, 26072), (107, 26078), (115, 26123), (116,
26126), (123, 26210), (130, 26279), (135, 26324), (139, 26369), (145, 26414), (146, 26435), (147,
26453), (149, 26456), (150, 26462), (151, 26465), (158, 26603), (161, 26651), (162, 26657), (167,
26738), (174, 26831), (182, 26891), (184, 26900), (185, 26906), (187, 26927), (197, 27092), (198,
27158), (199, 27170), (200, 27188), (202, 27194), (207, 27428), (208, 27467), (211, 27512), (214,
27542), (217, 27635), (218, 27662),

Gene: MrMiyagi_24 Start: 20573, Stop: 24064, Start Num: 1
Candidate Starts for MrMiyagi_24:
(Start: 1 @20573 has 10 MA's), (10, 20798), (12, 20867), (15, 20900), (29, 21095), (34, 21191), (35, 21194), (36, 21200), (38, 21227), (42, 21245), (65, 21695), (66, 21716), (67, 21782), (75, 21902), (78, 21971), (79, 21977), (89, 22121), (91, 22154), (94, 22196), (103, 22271), (107, 22358), (118, 22445), (119, 22448), (121, 22460), (134, 22586), (138, 22619), (144, 22691), (147, 22730), (170, 23030), (176, 23120), (183, 23156), (213, 23810),

Gene: Nilo_31 Start: 24634, Stop: 28134, Start Num: 1
Candidate Starts for Nilo_31:
(Start: 1 @24634 has 10 MA's), (3, 24646), (Start: 4 @24658 has 1 MA's), (9, 24841), (11, 24922), (19, 25021), (20, 25045), (22, 25063), (32, 25222), (33, 25255), (38, 25303), (43, 25342), (51, 25468), (52, 25477), (59, 25663), (67, 25864), (77, 26041), (84, 26140), (86, 26173), (90, 26218), (91, 26230), (94, 26272), (98, 26284), (104, 26350), (107, 26434), (111, 26449), (115, 26479), (125, 26584), (130, 26635), (135, 26680), (139, 26725), (145, 26770), (146, 26791), (147, 26809), (149, 26812), (150, 26818), (151, 26821), (158, 26959), (161, 27007), (162, 27013), (167, 27094), (174, 27187), (182, 27247), (184, 27256), (185, 27262), (187, 27283), (197, 27448), (198, 27514), (199, 27526), (200, 27544), (202, 27550), (207, 27784), (208, 27823), (211, 27868), (214, 27898), (217, 27991), (218, 28018),

Gene: Papyrus_30 Start: 24299, Stop: 27793, Start Num: 1
Candidate Starts for Papyrus_30:
(Start: 1 @24299 has 10 MA's), (3, 24311), (Start: 4 @24323 has 1 MA's), (9, 24506), (11, 24587), (19, 24686), (20, 24710), (22, 24728), (32, 24887), (33, 24920), (38, 24968), (43, 25007), (51, 25133), (52, 25142), (59, 25328), (67, 25529), (77, 25706), (84, 25805), (86, 25838), (90, 25883), (96, 25946), (104, 26015), (106, 26093), (107, 26099), (115, 26144), (116, 26147), (123, 26231), (151, 26486), (152, 26525), (161, 26672), (162, 26678), (174, 26852), (179, 26885), (182, 26906), (184, 26915), (187, 26942), (199, 27185), (204, 27329), (211, 27527), (214, 27557), (215, 27614), (217, 27650), (218, 27677), (219, 27689),

Gene: Riparian_30 Start: 24095, Stop: 27595, Start Num: 1
Candidate Starts for Riparian_30:
(Start: 1 @24095 has 10 MA's), (3, 24107), (Start: 4 @24119 has 1 MA's), (9, 24302), (11, 24383), (19, 24482), (20, 24506), (22, 24524), (32, 24683), (33, 24716), (38, 24764), (43, 24803), (51, 24929), (52, 24938), (59, 25124), (67, 25325), (77, 25502), (84, 25601), (86, 25634), (90, 25679), (94, 25733), (98, 25745), (104, 25811), (107, 25895), (111, 25910), (115, 25940), (125, 26045), (130, 26096), (135, 26141), (139, 26186), (145, 26231), (146, 26252), (147, 26270), (149, 26273), (150, 26279), (151, 26282), (158, 26420), (161, 26468), (162, 26474), (164, 26534), (167, 26555), (174, 26648), (182, 26708), (184, 26717), (185, 26723), (187, 26744), (197, 26909), (198, 26975), (199, 26987), (200, 27005), (202, 27011), (207, 27245), (208, 27284), (211, 27329), (214, 27359), (217, 27452), (218, 27479),

Gene: Rope_30 Start: 24281, Stop: 27775, Start Num: 1
Candidate Starts for Rope_30:
(Start: 1 @24281 has 10 MA's), (3, 24293), (Start: 4 @24305 has 1 MA's), (9, 24488), (11, 24569), (19, 24668), (20, 24692), (22, 24710), (32, 24869), (33, 24902), (38, 24950), (43, 24989), (51, 25115), (52, 25124), (59, 25310), (67, 25511), (77, 25688), (84, 25787), (86, 25820), (90, 25865), (91, 25877), (94, 25919), (95, 25925), (96, 25928), (104, 25997), (106, 26075), (107, 26081), (115, 26126), (116, 26129), (123, 26213), (151, 26468), (152, 26507), (161, 26654), (162, 26660), (174, 26834), (179, 26867), (182, 26888), (184, 26897), (187, 26924), (199, 27167), (204, 27311), (211, 27509), (214, 27539), (215, 27596), (217, 27632), (218, 27659), (219, 27671),

Gene: Send513_30 Start: 24637, Stop: 28131, Start Num: 1
Candidate Starts for Send513_30:
(Start: 1 @24637 has 10 MA's), (3, 24649), (Start: 4 @24661 has 1 MA's), (9, 24844), (11, 24925), (19, 25024), (20, 25048), (22, 25066), (32, 25225), (33, 25258), (38, 25306), (43, 25345), (51, 25471), (52, 25480), (59, 25666), (67, 25867), (77, 26044), (84, 26143), (86, 26176), (90, 26221), (91, 26233), (94, 26275), (95, 26281), (96, 26284), (104, 26353), (106, 26431), (107, 26437), (115, 26482), (116, 26485), (123, 26569), (151, 26824), (152, 26863), (161, 27010), (162, 27016), (174, 27190), (179, 27223), (182, 27244), (184, 27253), (187, 27280), (199, 27523), (204, 27667), (211, 27865), (214, 27895), (215, 27952), (217, 27988), (218, 28015), (219, 28027),

Gene: Weiss13_30 Start: 24327, Stop: 27827, Start Num: 1
Candidate Starts for Weiss13_30:
(Start: 1 @24327 has 10 MA's), (3, 24339), (Start: 4 @24351 has 1 MA's), (9, 24534), (11, 24615), (19, 24714), (20, 24738), (22, 24756), (32, 24915), (33, 24948), (38, 24996), (41, 25011), (43, 25035), (51, 25161), (52, 25170), (59, 25356), (67, 25557), (77, 25734), (84, 25833), (86, 25866), (90, 25911), (91, 25923), (94, 25965), (98, 25977), (104, 26043), (107, 26127), (111, 26142), (115, 26172), (125, 26277), (130, 26328), (135, 26373), (139, 26418), (145, 26463), (146, 26484), (147, 26502), (149, 26505), (150, 26511), (151, 26514), (158, 26652), (161, 26700), (162, 26706), (164, 26766), (167, 26787), (174, 26880), (182, 26940), (184, 26949), (185, 26955), (187, 26976), (194, 27081), (197, 27141), (198, 27207), (199, 27219), (200, 27237), (202, 27243), (207, 27477), (208, 27516), (211, 27561), (214, 27591), (217, 27684), (218, 27711),

Gene: Yelo_30 Start: 24620, Stop: 28120, Start Num: 1
Candidate Starts for Yelo_30:
(Start: 1 @24620 has 10 MA's), (3, 24632), (Start: 4 @24644 has 1 MA's), (9, 24827), (11, 24908), (19, 25007), (20, 25031), (22, 25049), (32, 25208), (33, 25241), (38, 25289), (43, 25328), (51, 25454), (52, 25463), (59, 25649), (67, 25850), (77, 26027), (84, 26126), (86, 26159), (90, 26204), (94, 26258), (96, 26267), (98, 26270), (104, 26336), (107, 26420), (111, 26435), (115, 26465), (125, 26570), (130, 26621), (135, 26666), (139, 26711), (145, 26756), (146, 26777), (147, 26795), (149, 26798), (150, 26804), (151, 26807), (158, 26945), (161, 26993), (162, 26999), (164, 27059), (167, 27080), (174, 27173), (182, 27233), (184, 27242), (185, 27248), (187, 27269), (197, 27434), (198, 27500), (199, 27512), (200, 27530), (202, 27536), (207, 27770), (208, 27809), (211, 27854), (214, 27884), (217, 27977), (218, 28004),

Gene: Zenon_31 Start: 24639, Stop: 28139, Start Num: 1
Candidate Starts for Zenon_31:
(Start: 1 @24639 has 10 MA's), (3, 24651), (Start: 4 @24663 has 1 MA's), (9, 24846), (11, 24927), (19, 25026), (20, 25050), (22, 25068), (32, 25227), (33, 25260), (38, 25308), (43, 25347), (51, 25473), (52, 25482), (59, 25668), (67, 25869), (77, 26046), (84, 26145), (86, 26178), (90, 26223), (91, 26235), (94, 26277), (98, 26289), (104, 26355), (107, 26439), (111, 26454), (115, 26484), (125, 26589), (130, 26640), (135, 26685), (139, 26730), (145, 26775), (146, 26796), (147, 26814), (149, 26817), (150, 26823), (151, 26826), (158, 26964), (161, 27012), (162, 27018), (164, 27078), (167, 27099), (174, 27192), (182, 27252), (184, 27261), (185, 27267), (187, 27288), (197, 27453), (198, 27519), (199, 27531), (200, 27549), (202, 27555), (207, 27789), (208, 27828), (211, 27873), (214, 27903), (217, 27996), (218, 28023),