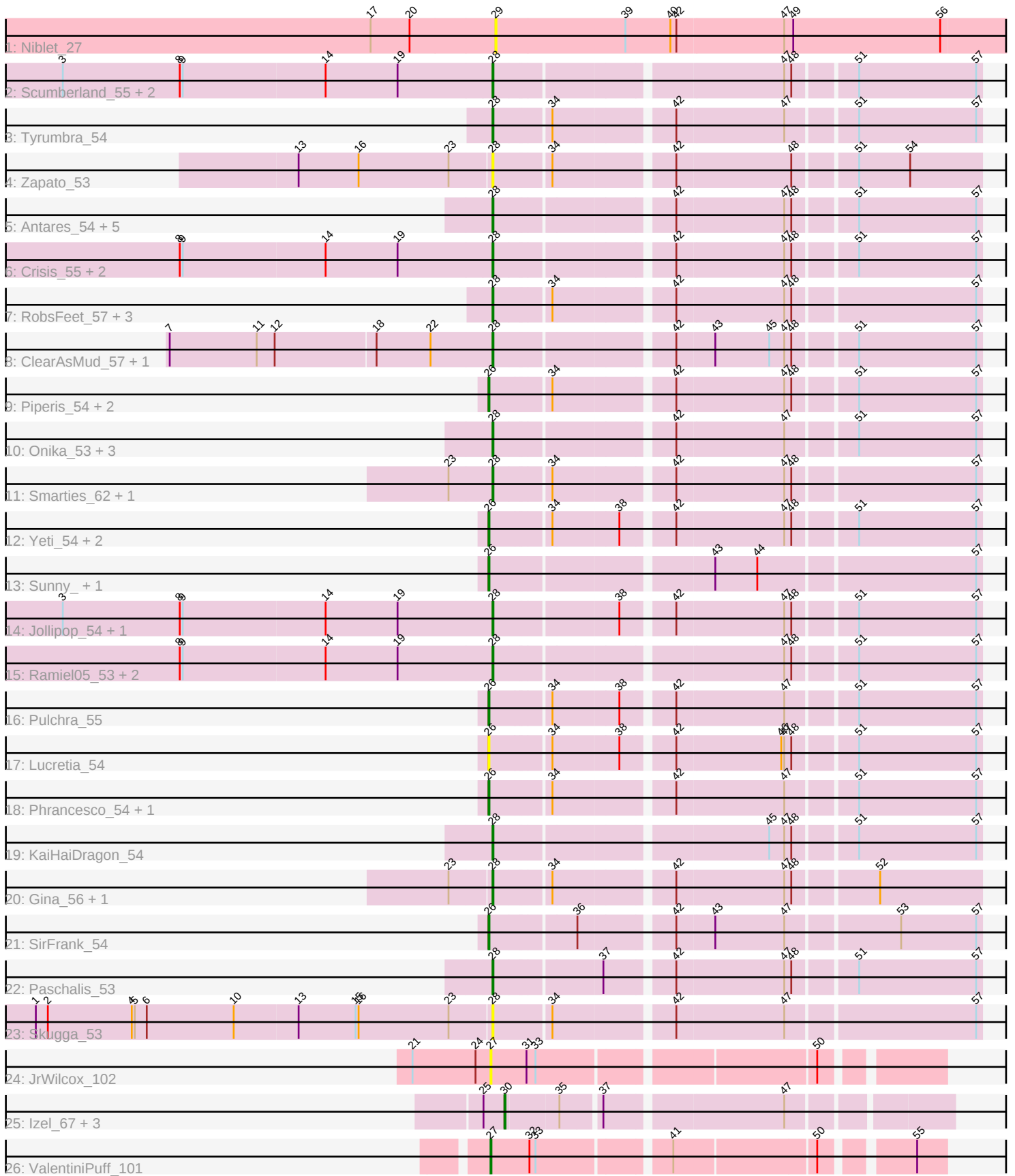


Pham 280496



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 280496 Report

This analysis was run 02/07/26 on database version 634.

Pham number 280496 has 56 members, 9 are drafts.

Phages represented in each track:

- Track 1 : Niblet_27
- Track 2 : Scumberland_55, Cranjis_55, LittleFortune_55
- Track 3 : Tyumbra_54
- Track 4 : Zapato_53
- Track 5 : Antares_54, Quhwah_57, Shotgun_53, PhedwardCullen_52, BeagleBug_53, Savannah_53
- Track 6 : Crisis_55, CrazyRich_53, Jefe_54
- Track 7 : RobsFeet_57, Metamorphoo_56, Fireman_56, Shrubaron_56
- Track 8 : ClearAsMud_57, NoodlelyBoi_55
- Track 9 : Piperis_54, Ganandorf_53, Phorgeous_53
- Track 10 : Onika_53, PiperSansNom_54, Rockwell_53, Hermeonysus_53
- Track 11 : Smarties_62, Ariadne_62
- Track 12 : Yeti_54, Glorp_55, Honeyfin_55
- Track 13 : Sunny_, Merry_
- Track 14 : Jollipop_54, PierreOrion_54
- Track 15 : Ramiel05_53, Kowalski_53, BrazzalePHS_53
- Track 16 : Pulchra_55
- Track 17 : Lucretia_54
- Track 18 : Phrancesco_54, Busephilis_53
- Track 19 : KaiHaiDragon_54
- Track 20 : Gina_56, Teamocil_56
- Track 21 : SirFrank_54
- Track 22 : Paschalis_53
- Track 23 : Skugga_53
- Track 24 : JrWilcox_102
- Track 25 : Izel_67, Dulcita_67, Glaske16_67, FreakyGoo_67
- Track 26 : ValentiniPuff_101

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

The start number called the most often in the published annotations is 28, it was called in 30 of the 47 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Antares_54, Ariadne_62, BeagleBug_53, BrazzalePHS_53, ClearAsMud_57, Cranjis_55, CrazyRich_53, Crisis_55, Fireman_56, Gina_56, Hermeonysus_53, Jefe_54, Jollipop_54, KaiHaiDragon_54, Kowalski_53, LittleFortune_55, Metamorphoo_56, NoodlelyBoi_55, Onika_53, Paschalis_53, PhedwardCullen_52, PierreOrion_54, PiperSansNom_54, Quhwah_57, Ramiel05_53, RobsFeet_57, Rockwell_53, Savannah_53, Scumberland_55, Shotgun_53, Shrubaron_56, Skugga_53, Smarties_62, Teamocil_56, Tyumbra_54, Zapato_53,

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

-

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

- Busephilis_53, Dulcita_67, FreakyGoo_67, Ganandorf_53, Glaske16_67, Glorp_55, Honeyfin_55, Izel_67, JrWilcox_102, Lucretia_54, Merry_, Niblet_27, Phorgeous_53, Phrancesco_54, Piperis_54, Pulchra_55, SirFrank_54, Sunny_, ValentiniPuff_101, Yeti_54,

Summary by start number:

Start 26:

- Found in 13 of 56 (23.2%) of genes in pham
- Manual Annotations of this start: 12 of 47
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Busephilis_53 (EC), Ganandorf_53 (EC), Glorp_55 (EC), Honeyfin_55 (EC), Lucretia_54 (EC), Merry_ (EC), Phorgeous_53 (EC), Phrancesco_54 (EC), Piperis_54 (EC), Pulchra_55 (EC), SirFrank_54 (EC), Sunny_ (EC), Yeti_54 (EC),

Start 27:

- Found in 2 of 56 (3.6%) of genes in pham
- Manual Annotations of this start: 1 of 47
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JrWilcox_102 (GL), ValentiniPuff_101 (singleton),

Start 28:

- Found in 36 of 56 (64.3%) of genes in pham
- Manual Annotations of this start: 30 of 47
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Antares_54 (EC), Ariadne_62 (EC), BeagleBug_53 (EC), BrazzalePHS_53 (EC), ClearAsMud_57 (EC), Cranjis_55 (EC), CrazyRich_53 (EC), Crisis_55 (EC), Fireman_56 (EC), Gina_56 (EC), Hermeonysus_53 (EC), Jefe_54 (EC), Jollipop_54 (EC), KaiHaiDragon_54 (EC), Kowalski_53 (EC), LittleFortune_55 (EC), Metamorphoo_56 (EC), NoodlelyBoi_55 (EC), Onika_53 (EC), Paschalis_53 (EC), PhedwardCullen_52 (EC), PierreOrion_54 (EC), PiperSansNom_54 (EC), Quhwah_57 (EC), Ramiel05_53 (EC), RobsFeet_57 (EC), Rockwell_53 (EC), Savannah_53 (EC), Scumberland_55 (EC), Shotgun_53 (EC), Shrubaron_56 (EC), Skugga_53 (EC), Smarties_62 (EC), Teamocil_56 (EC), Tyumbra_54 (EC), Zapato_53 (EC),

Start 29:

- Found in 1 of 56 (1.8%) of genes in pham
- No Manual Annotations of this start.

- Called 100.0% of time when present
- Phage (with cluster) where this start called: Niblet_27 (AS1),

Start 30:

- Found in 4 of 56 (7.1%) of genes in pham
- Manual Annotations of this start: 4 of 47
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Dulcita_67 (M1), FreakyGoo_67 (M1), Glaske16_67 (M1), Izel_67 (M1),

Summary by clusters:

There are 5 clusters represented in this pham: AS1, GL, M1, singleton, EC,

Info for manual annotations of cluster EC:

- Start number 26 was manually annotated 12 times for cluster EC.
- Start number 28 was manually annotated 30 times for cluster EC.

Info for manual annotations of cluster M1:

- Start number 30 was manually annotated 4 times for cluster M1.

Gene Information:

Gene: Antares_54 Start: 35918, Stop: 36367, Start Num: 28

Candidate Starts for Antares_54:

(Start: 28 @35918 has 30 MA's), (42, 36077), (47, 36182), (48, 36188), (51, 36245), (57, 36362),

Gene: Ariadne_62 Start: 37502, Stop: 37951, Start Num: 28

Candidate Starts for Ariadne_62:

(23, 37460), (Start: 28 @37502 has 30 MA's), (34, 37553), (42, 37661), (47, 37766), (48, 37772), (57, 37946),

Gene: BeagleBug_53 Start: 35699, Stop: 36148, Start Num: 28

Candidate Starts for BeagleBug_53:

(Start: 28 @35699 has 30 MA's), (42, 35858), (47, 35963), (48, 35969), (51, 36026), (57, 36143),

Gene: BrazzalePHS_53 Start: 35714, Stop: 36163, Start Num: 28

Candidate Starts for BrazzalePHS_53:

(8, 35405), (9, 35408), (14, 35549), (19, 35621), (Start: 28 @35714 has 30 MA's), (47, 35978), (48, 35984), (51, 36041), (57, 36158),

Gene: Busephilis_53 Start: 35622, Stop: 36074, Start Num: 26

Candidate Starts for Busephilis_53:

(Start: 26 @35622 has 12 MA's), (34, 35676), (42, 35784), (47, 35889), (51, 35952), (57, 36069),

Gene: ClearAsMud_57 Start: 36175, Stop: 36624, Start Num: 28

Candidate Starts for ClearAsMud_57:

(7, 35857), (11, 35944), (12, 35962), (18, 36061), (22, 36115), (Start: 28 @36175 has 30 MA's), (42, 36334), (43, 36370), (45, 36424), (47, 36439), (48, 36445), (51, 36502), (57, 36619),

Gene: Cranjis_55 Start: 35873, Stop: 36322, Start Num: 28

Candidate Starts for Cranjis_55:

(3, 35447), (8, 35564), (9, 35567), (14, 35708), (19, 35780), (Start: 28 @35873 has 30 MA's), (47, 36137), (48, 36143), (51, 36200), (57, 36317),

Gene: CrazyRich_53 Start: 35682, Stop: 36131, Start Num: 28

Candidate Starts for CrazyRich_53:

(8, 35373), (9, 35376), (14, 35517), (19, 35589), (Start: 28 @35682 has 30 MA's), (42, 35841), (47, 35946), (48, 35952), (51, 36009), (57, 36126),

Gene: Crisis_55 Start: 35673, Stop: 36122, Start Num: 28

Candidate Starts for Crisis_55:

(8, 35364), (9, 35367), (14, 35508), (19, 35580), (Start: 28 @35673 has 30 MA's), (42, 35832), (47, 35937), (48, 35943), (51, 36000), (57, 36117),

Gene: Dulcita_67 Start: 43444, Stop: 43842, Start Num: 30

Candidate Starts for Dulcita_67:

(25, 43423), (Start: 30 @43444 has 4 MA's), (35, 43492), (37, 43528), (47, 43693),

Gene: Fireman_56 Start: 37569, Stop: 38018, Start Num: 28

Candidate Starts for Fireman_56:

(Start: 28 @37569 has 30 MA's), (34, 37620), (42, 37728), (47, 37833), (48, 37839), (57, 38013),

Gene: FreakyGoo_67 Start: 43444, Stop: 43842, Start Num: 30

Candidate Starts for FreakyGoo_67:

(25, 43423), (Start: 30 @43444 has 4 MA's), (35, 43492), (37, 43528), (47, 43693),

Gene: Ganandorf_53 Start: 35703, Stop: 36155, Start Num: 26

Candidate Starts for Ganandorf_53:

(Start: 26 @35703 has 12 MA's), (34, 35757), (42, 35865), (47, 35970), (48, 35976), (51, 36033), (57, 36150),

Gene: Gina_56 Start: 35677, Stop: 36126, Start Num: 28

Candidate Starts for Gina_56:

(23, 35638), (Start: 28 @35677 has 30 MA's), (34, 35728), (42, 35836), (47, 35941), (48, 35947), (52, 36025),

Gene: Glaske16_67 Start: 43443, Stop: 43841, Start Num: 30

Candidate Starts for Glaske16_67:

(25, 43422), (Start: 30 @43443 has 4 MA's), (35, 43491), (37, 43527), (47, 43692),

Gene: Glorp_55 Start: 35704, Stop: 36156, Start Num: 26

Candidate Starts for Glorp_55:

(Start: 26 @35704 has 12 MA's), (34, 35758), (38, 35821), (42, 35866), (47, 35971), (48, 35977), (51, 36034), (57, 36151),

Gene: Hermeonysus_53 Start: 35602, Stop: 36051, Start Num: 28

Candidate Starts for Hermeonysus_53:

(Start: 28 @35602 has 30 MA's), (42, 35761), (47, 35866), (51, 35929), (57, 36046),

Gene: Honeyfin_55 Start: 35891, Stop: 36343, Start Num: 26

Candidate Starts for Honeyfin_55:

(Start: 26 @35891 has 12 MA's), (34, 35945), (38, 36008), (42, 36053), (47, 36158), (48, 36164), (51, 36221), (57, 36338),

Gene: Izel_67 Start: 43443, Stop: 43841, Start Num: 30

Candidate Starts for Izel_67:

(25, 43422), (Start: 30 @43443 has 4 MA's), (35, 43491), (37, 43527), (47, 43692),

Gene: Jefe_54 Start: 35660, Stop: 36109, Start Num: 28

Candidate Starts for Jefe_54:

(8, 35351), (9, 35354), (14, 35495), (19, 35567), (Start: 28 @35660 has 30 MA's), (42, 35819), (47, 35924), (48, 35930), (51, 35987), (57, 36104),

Gene: Jollipop_54 Start: 35999, Stop: 36448, Start Num: 28

Candidate Starts for Jollipop_54:

(3, 35573), (8, 35690), (9, 35693), (14, 35834), (19, 35906), (Start: 28 @35999 has 30 MA's), (38, 36113), (42, 36158), (47, 36263), (48, 36269), (51, 36326), (57, 36443),

Gene: JrWilcox_102 Start: 57042, Stop: 57449, Start Num: 27

Candidate Starts for JrWilcox_102:

(21, 56964), (24, 57027), (Start: 27 @57042 has 1 MA's), (31, 57078), (33, 57087), (50, 57342),

Gene: KaiHaiDragon_54 Start: 35596, Stop: 36045, Start Num: 28

Candidate Starts for KaiHaiDragon_54:

(Start: 28 @35596 has 30 MA's), (45, 35845), (47, 35860), (48, 35866), (51, 35923), (57, 36040),

Gene: Kowalski_53 Start: 35709, Stop: 36158, Start Num: 28

Candidate Starts for Kowalski_53:

(8, 35400), (9, 35403), (14, 35544), (19, 35616), (Start: 28 @35709 has 30 MA's), (47, 35973), (48, 35979), (51, 36036), (57, 36153),

Gene: LittleFortune_55 Start: 35965, Stop: 36414, Start Num: 28

Candidate Starts for LittleFortune_55:

(3, 35539), (8, 35656), (9, 35659), (14, 35800), (19, 35872), (Start: 28 @35965 has 30 MA's), (47, 36229), (48, 36235), (51, 36292), (57, 36409),

Gene: Lucretia_54 Start: 35620, Stop: 36072, Start Num: 26

Candidate Starts for Lucretia_54:

(Start: 26 @35620 has 12 MA's), (34, 35674), (38, 35737), (42, 35782), (46, 35884), (47, 35887), (48, 35893), (51, 35950), (57, 36067),

Gene: Merry_ Start: 37459, Stop: 37911, Start Num: 26

Candidate Starts for Merry_:

(Start: 26 @37459 has 12 MA's), (43, 37657), (44, 37699), (57, 37906),

Gene: Metamorphoo_56 Start: 36831, Stop: 37280, Start Num: 28

Candidate Starts for Metamorphoo_56:

(Start: 28 @36831 has 30 MA's), (34, 36882), (42, 36990), (47, 37095), (48, 37101), (57, 37275),

Gene: Niblet_27 Start: 21668, Stop: 21147, Start Num: 29

Candidate Starts for Niblet_27:

(17, 21791), (20, 21752), (29, 21668), (39, 21539), (40, 21494), (42, 21488), (47, 21383), (49, 21374), (56, 21227),

Gene: NoodlelyBoi_55 Start: 36387, Stop: 36836, Start Num: 28

Candidate Starts for NoodlelyBoi_55:

(7, 36069), (11, 36156), (12, 36174), (18, 36273), (22, 36327), (Start: 28 @36387 has 30 MA's), (42, 36546), (43, 36582), (45, 36636), (47, 36651), (48, 36657), (51, 36714), (57, 36831),

Gene: Onika_53 Start: 35684, Stop: 36133, Start Num: 28

Candidate Starts for Onika_53:

(Start: 28 @35684 has 30 MA's), (42, 35843), (47, 35948), (51, 36011), (57, 36128),

Gene: Paschalis_53 Start: 35691, Stop: 36140, Start Num: 28

Candidate Starts for Paschalis_53:

(Start: 28 @35691 has 30 MA's), (37, 35790), (42, 35850), (47, 35955), (48, 35961), (51, 36018), (57, 36135),

Gene: PhedwardCullen_52 Start: 35442, Stop: 35891, Start Num: 28

Candidate Starts for PhedwardCullen_52:

(Start: 28 @35442 has 30 MA's), (42, 35601), (47, 35706), (48, 35712), (51, 35769), (57, 35886),

Gene: Phorgeous_53 Start: 35522, Stop: 35974, Start Num: 26

Candidate Starts for Phorgeous_53:

(Start: 26 @35522 has 12 MA's), (34, 35576), (42, 35684), (47, 35789), (48, 35795), (51, 35852), (57, 35969),

Gene: Phrancesco_54 Start: 35812, Stop: 36264, Start Num: 26

Candidate Starts for Phrancesco_54:

(Start: 26 @35812 has 12 MA's), (34, 35866), (42, 35974), (47, 36079), (51, 36142), (57, 36259),

Gene: PierreOrion_54 Start: 35858, Stop: 36307, Start Num: 28

Candidate Starts for PierreOrion_54:

(3, 35432), (8, 35549), (9, 35552), (14, 35693), (19, 35765), (Start: 28 @35858 has 30 MA's), (38, 35972), (42, 36017), (47, 36122), (48, 36128), (51, 36185), (57, 36302),

Gene: PiperSansNom_54 Start: 35998, Stop: 36447, Start Num: 28

Candidate Starts for PiperSansNom_54:

(Start: 28 @35998 has 30 MA's), (42, 36157), (47, 36262), (51, 36325), (57, 36442),

Gene: Piperis_54 Start: 35645, Stop: 36097, Start Num: 26

Candidate Starts for Piperis_54:

(Start: 26 @35645 has 12 MA's), (34, 35699), (42, 35807), (47, 35912), (48, 35918), (51, 35975), (57, 36092),

Gene: Pulchra_55 Start: 36042, Stop: 36494, Start Num: 26

Candidate Starts for Pulchra_55:

(Start: 26 @36042 has 12 MA's), (34, 36096), (38, 36159), (42, 36204), (47, 36309), (51, 36372), (57, 36489),

Gene: Quhwah_57 Start: 36306, Stop: 36755, Start Num: 28

Candidate Starts for Quhwah_57:

(Start: 28 @36306 has 30 MA's), (42, 36465), (47, 36570), (48, 36576), (51, 36633), (57, 36750),

Gene: Ramiel05_53 Start: 35709, Stop: 36158, Start Num: 28

Candidate Starts for Ramiel05_53:

(8, 35400), (9, 35403), (14, 35544), (19, 35616), (Start: 28 @35709 has 30 MA's), (47, 35973), (48, 35979), (51, 36036), (57, 36153),

Gene: RobsFeet_57 Start: 37130, Stop: 37579, Start Num: 28

Candidate Starts for RobsFeet_57:

(Start: 28 @37130 has 30 MA's), (34, 37181), (42, 37289), (47, 37394), (48, 37400), (57, 37574),

Gene: Rockwell_53 Start: 35709, Stop: 36158, Start Num: 28

Candidate Starts for Rockwell_53:

(Start: 28 @35709 has 30 MA's), (42, 35868), (47, 35973), (51, 36036), (57, 36153),

Gene: Savannah_53 Start: 35736, Stop: 36185, Start Num: 28

Candidate Starts for Savannah_53:

(Start: 28 @35736 has 30 MA's), (42, 35895), (47, 36000), (48, 36006), (51, 36063), (57, 36180),

Gene: Scumberland_55 Start: 35931, Stop: 36380, Start Num: 28

Candidate Starts for Scumberland_55:

(3, 35505), (8, 35622), (9, 35625), (14, 35766), (19, 35838), (Start: 28 @35931 has 30 MA's), (47, 36195), (48, 36201), (51, 36258), (57, 36375),

Gene: Shotgun_53 Start: 35535, Stop: 35984, Start Num: 28

Candidate Starts for Shotgun_53:

(Start: 28 @35535 has 30 MA's), (42, 35694), (47, 35799), (48, 35805), (51, 35862), (57, 35979),

Gene: Shrubaron_56 Start: 36743, Stop: 37192, Start Num: 28

Candidate Starts for Shrubaron_56:

(Start: 28 @36743 has 30 MA's), (34, 36794), (42, 36902), (47, 37007), (48, 37013), (57, 37187),

Gene: SirFrank_54 Start: 35866, Stop: 36318, Start Num: 26

Candidate Starts for SirFrank_54:

(Start: 26 @35866 has 12 MA's), (36, 35944), (42, 36028), (43, 36064), (47, 36133), (53, 36238), (57, 36313),

Gene: Skugga_53 Start: 35695, Stop: 36144, Start Num: 28

Candidate Starts for Skugga_53:

(1, 35245), (2, 35257), (4, 35341), (5, 35344), (6, 35356), (10, 35443), (13, 35506), (15, 35563), (16, 35566), (23, 35656), (Start: 28 @35695 has 30 MA's), (34, 35746), (42, 35854), (47, 35959), (57, 36139),

Gene: Smarties_62 Start: 37502, Stop: 37951, Start Num: 28

Candidate Starts for Smarties_62:

(23, 37460), (Start: 28 @37502 has 30 MA's), (34, 37553), (42, 37661), (47, 37766), (48, 37772), (57, 37946),

Gene: Sunny_ Start: 37461, Stop: 37913, Start Num: 26

Candidate Starts for Sunny_:

(Start: 26 @37461 has 12 MA's), (43, 37659), (44, 37701), (57, 37908),

Gene: Teamocil_56 Start: 35776, Stop: 36225, Start Num: 28

Candidate Starts for Teamocil_56:

(23, 35737), (Start: 28 @35776 has 30 MA's), (34, 35827), (42, 35935), (47, 36040), (48, 36046), (52, 36124),

Gene: Tyrumbra_54 Start: 36909, Stop: 37358, Start Num: 28

Candidate Starts for Tyrumbra_54:

(Start: 28 @36909 has 30 MA's), (34, 36960), (42, 37068), (47, 37173), (51, 37236), (57, 37353),

Gene: ValentiniPuff_101 Start: 57583, Stop: 57990, Start Num: 27

Candidate Starts for ValentiniPuff_101:

(Start: 27 @57583 has 1 MA's), (32, 57622), (33, 57628), (41, 57748), (50, 57883), (55, 57961),

Gene: Yeti_54 Start: 35678, Stop: 36130, Start Num: 26

Candidate Starts for Yeti_54:

(Start: 26 @35678 has 12 MA's), (34, 35732), (38, 35795), (42, 35840), (47, 35945), (48, 35951), (51, 36008), (57, 36125),

Gene: Zapato_53 Start: 35894, Stop: 36343, Start Num: 28

Candidate Starts for Zapato_53:

(13, 35705), (16, 35765), (23, 35855), (Start: 28 @35894 has 30 MA's), (34, 35945), (42, 36053), (48, 36164), (51, 36221), (54, 36272),