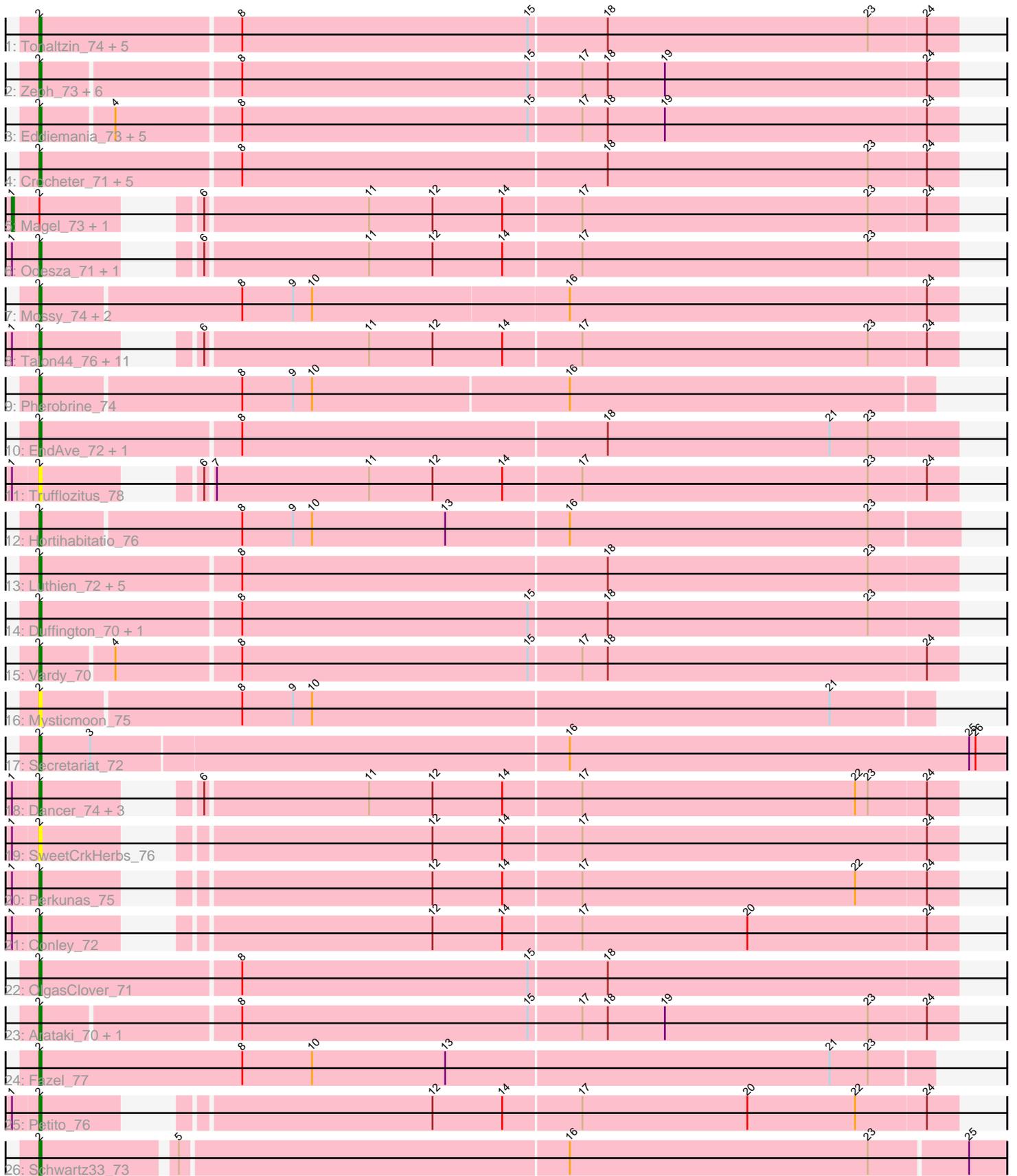


Pham 289362



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 289362 Report

This analysis was run 03/28/26 on database version 641.

Pham number 289362 has 73 members, 17 are drafts.

Phages represented in each track:

- Track 1 : Tonaltzin_74, TenaciousP_71, Aflac_70, Figliar_69, Jodelie19_69, MajinBuu_71
- Track 2 : Zeph_73, ArtetaBall_70, Phepper_72, Untouchable_73, CWormy_70, Hydrus_73, Dialga_72
- Track 3 : Eddiemania_73, Kenosha_70, Madvan_71, Runhaar_71, Burley_71, Nadmeg_72
- Track 4 : Crocheter_71, PestoPenguin_76, BetterYeti_71, Aloe25_74, ShaggyRogers_71, Gusicorn_72
- Track 5 : Magel_73, Gill_72
- Track 6 : Odesza_71, Roney_72
- Track 7 : Mossy_74, Blanky_71, OhMyWard_70
- Track 8 : Talon44_76, ChickyNuggy_77, Kerry_71, Captrips_73, Capybara_72, Avazak_75, Tanis_72, Gravy_71, Tairn4Wing_76, NoPickles_73, Football_76, JulesRay_74
- Track 9 : Pherobrine_74
- Track 10 : EndAve_72, AlainaMarie_70
- Track 11 : Trufflozitus_78
- Track 12 : Hortihabitatio_76
- Track 13 : Luthien_72, Glintora_72, Chickenjars_69, Citrus_70, Rickmore_68, Nithya_71
- Track 14 : Duffington_70, BluerMoon_69
- Track 15 : Vardy_70
- Track 16 : Mysticmoon_75
- Track 17 : Secretariat_72
- Track 18 : Dancer_74, Bugg_77, Artorias_74, FortCran_74
- Track 19 : SweetCrkHerbs_76
- Track 20 : Perkunas_75
- Track 21 : Conley_72
- Track 22 : OlgasClover_71
- Track 23 : Arataki_70, Demure_69
- Track 24 : Fazel_77
- Track 25 : Petite_76
- Track 26 : Schwartz33_73

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

The start number called the most often in the published annotations is 2, it was called in 54 of the 56 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aflac_70, AlainaMarie_70, Aloe25_74, Arataki_70, ArtetaBall_70, Artorias_74, Avazak_75, BetterYeti_71, Blanky_71, BluerMoon_69, Bugg_77, Burley_71, CWormy_70, Captrips_73, Capybara_72, ChickyNuggy_77, Chikenjars_69, Citrus_70, Conley_72, Crocheter_71, Dancer_74, Demure_69, Dialga_72, Duffington_70, Eddiemania_73, EndAve_72, Fazel_77, Figliar_69, Football_76, FortCran_74, Glintora_72, Gravy_71, Gusicorn_72, Hortihabitatio_76, Hydrus_73, Jodelie19_69, JulesRay_74, Kenosha_70, Kerry_71, Luthien_72, Madvan_71, MajinBuu_71, Mossy_74, Mysticmoon_75, Nadmeg_72, Nithya_71, NoPickles_73, Odesza_71, OhMyWard_70, OlgasClover_71, Perkunas_75, PestoPenguin_76, Petite_76, Phepper_72, Pherobrine_74, Rickmore_68, Roney_72, Runhaar_71, Schwartz33_73, Secretariat_72, ShaggyRogers_71, SweetCrkHerbs_76, Tairn4Wing_76, Talon44_76, Tanis_72, TenaciousP_71, Tonaltzin_74, Trufflozitus_78, Untouchable_73, Vardy_70, Zeph_73,

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

- Gill_72, Magel_73,

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

-

Summary by start number:

Start 1:

- Found in 25 of 73 (34.2%) of genes in pham
- Manual Annotations of this start: 2 of 56
- Called 8.0% of time when present
- Phage (with cluster) where this start called: Gill_72 (DJ), Magel_73 (DJ),

Start 2:

- Found in 73 of 73 (100.0%) of genes in pham
- Manual Annotations of this start: 54 of 56
- Called 97.3% of time when present
- Phage (with cluster) where this start called: Aflac_70 (DJ), AlainaMarie_70 (DJ), Aloe25_74 (DJ), Arataki_70 (DJ), ArtetaBall_70 (DJ), Artorias_74 (DJ), Avazak_75 (DJ), BetterYeti_71 (DJ), Blanky_71 (DJ), BluerMoon_69 (DJ), Bugg_77 (DJ), Burley_71 (DJ), CWormy_70 (DJ), Captrips_73 (DJ), Capybara_72 (DJ), ChickyNuggy_77 (DJ), Chikenjars_69 (DJ), Citrus_70 (DJ), Conley_72 (DJ), Crocheter_71 (DJ), Dancer_74 (DJ), Demure_69 (DJ), Dialga_72 (DJ), Duffington_70 (DJ), Eddiemania_73 (DJ), EndAve_72 (DJ), Fazel_77 (DJ), Figliar_69 (DJ), Football_76 (DJ), FortCran_74 (DJ), Glintora_72 (DJ), Gravy_71 (DJ), Gusicorn_72 (DJ), Hortihabitatio_76 (DJ), Hydrus_73 (DJ), Jodelie19_69 (DJ), JulesRay_74 (DJ), Kenosha_70 (DJ), Kerry_71 (DJ), Luthien_72 (DJ), Madvan_71 (DJ), MajinBuu_71 (DJ), Mossy_74 (DJ), Mysticmoon_75 (DJ), Nadmeg_72 (DJ), Nithya_71 (DJ), NoPickles_73 (DJ), Odesza_71 (DJ), OhMyWard_70 (DJ), OlgasClover_71 (DJ), Perkunas_75 (DJ), PestoPenguin_76 (DJ), Petite_76 (DJ), Phepper_72 (DJ), Pherobrine_74 (DJ), Rickmore_68 (DJ), Roney_72 (DJ), Runhaar_71 (DJ), Schwartz33_73 (DJ), Secretariat_72 (DJ), ShaggyRogers_71 (DJ), SweetCrkHerbs_76 (DJ), Tairn4Wing_76 (DJ), Talon44_76 (DJ), Tanis_72 (DJ),

TenaciousP_71 (DJ), Tonaltzin_74 (DJ), Trufflozitus_78 (DJ), Untouchable_73 (DJ), Vardy_70 (DJ), Zeph_73 (DJ),

Summary by clusters:

There is one cluster represented in this pham: DJ

Info for manual annotations of cluster DJ:

- Start number 1 was manually annotated 2 times for cluster DJ.
- Start number 2 was manually annotated 54 times for cluster DJ.

Gene Information:

Gene: Aflac_70 Start: 49866, Stop: 50294, Start Num: 2

Candidate Starts for Aflac_70:

(Start: 2 @49866 has 54 MA's), (8, 49959), (15, 50094), (18, 50130), (23, 50253), (24, 50280),

Gene: AlainaMarie_70 Start: 49907, Stop: 50335, Start Num: 2

Candidate Starts for AlainaMarie_70:

(Start: 2 @49907 has 54 MA's), (8, 50000), (18, 50171), (21, 50276), (23, 50294),

Gene: Aloe25_74 Start: 49709, Stop: 50137, Start Num: 2

Candidate Starts for Aloe25_74:

(Start: 2 @49709 has 54 MA's), (8, 49802), (18, 49973), (23, 50096), (24, 50123),

Gene: Arataki_70 Start: 49339, Stop: 49764, Start Num: 2

Candidate Starts for Arataki_70:

(Start: 2 @49339 has 54 MA's), (8, 49429), (15, 49564), (17, 49588), (18, 49600), (19, 49627), (23, 49723), (24, 49750),

Gene: ArtetaBall_70 Start: 49902, Stop: 50327, Start Num: 2

Candidate Starts for ArtetaBall_70:

(Start: 2 @49902 has 54 MA's), (8, 49992), (15, 50127), (17, 50151), (18, 50163), (19, 50190), (24, 50313),

Gene: Artorias_74 Start: 49927, Stop: 50325, Start Num: 2

Candidate Starts for Artorias_74:

(Start: 1 @49915 has 2 MA's), (Start: 2 @49927 has 54 MA's), (6, 49975), (11, 50050), (12, 50080), (14, 50113), (17, 50149), (22, 50278), (23, 50284), (24, 50311),

Gene: Avazak_75 Start: 50609, Stop: 51007, Start Num: 2

Candidate Starts for Avazak_75:

(Start: 1 @50597 has 2 MA's), (Start: 2 @50609 has 54 MA's), (6, 50657), (11, 50732), (12, 50762), (14, 50795), (17, 50831), (23, 50966), (24, 50993),

Gene: BetterYeti_71 Start: 49708, Stop: 50136, Start Num: 2

Candidate Starts for BetterYeti_71:

(Start: 2 @49708 has 54 MA's), (8, 49801), (18, 49972), (23, 50095), (24, 50122),

Gene: Blanky_71 Start: 51188, Stop: 51616, Start Num: 2

Candidate Starts for Blanky_71:

(Start: 2 @51188 has 54 MA's), (8, 51281), (9, 51305), (10, 51314), (16, 51434), (24, 51602),

Gene: BluerMoon_69 Start: 49818, Stop: 50246, Start Num: 2

Candidate Starts for BluerMoon_69:

(Start: 2 @49818 has 54 MA's), (8, 49911), (15, 50046), (18, 50082), (23, 50205),

Gene: Bugg_77 Start: 49972, Stop: 50370, Start Num: 2

Candidate Starts for Bugg_77:

(Start: 1 @49960 has 2 MA's), (Start: 2 @49972 has 54 MA's), (6, 50020), (11, 50095), (12, 50125), (14, 50158), (17, 50194), (22, 50323), (23, 50329), (24, 50356),

Gene: Burley_71 Start: 49358, Stop: 49783, Start Num: 2

Candidate Starts for Burley_71:

(Start: 2 @49358 has 54 MA's), (4, 49391), (8, 49448), (15, 49583), (17, 49607), (18, 49619), (19, 49646), (24, 49769),

Gene: CWormy_70 Start: 49316, Stop: 49741, Start Num: 2

Candidate Starts for CWormy_70:

(Start: 2 @49316 has 54 MA's), (8, 49406), (15, 49541), (17, 49565), (18, 49577), (19, 49604), (24, 49727),

Gene: Captrips_73 Start: 49757, Stop: 50155, Start Num: 2

Candidate Starts for Captrips_73:

(Start: 1 @49745 has 2 MA's), (Start: 2 @49757 has 54 MA's), (6, 49805), (11, 49880), (12, 49910), (14, 49943), (17, 49979), (23, 50114), (24, 50141),

Gene: Capybara_72 Start: 49596, Stop: 49994, Start Num: 2

Candidate Starts for Capybara_72:

(Start: 1 @49584 has 2 MA's), (Start: 2 @49596 has 54 MA's), (6, 49644), (11, 49719), (12, 49749), (14, 49782), (17, 49818), (23, 49953), (24, 49980),

Gene: ChickyNuggy_77 Start: 50351, Stop: 50749, Start Num: 2

Candidate Starts for ChickyNuggy_77:

(Start: 1 @50339 has 2 MA's), (Start: 2 @50351 has 54 MA's), (6, 50399), (11, 50474), (12, 50504), (14, 50537), (17, 50573), (23, 50708), (24, 50735),

Gene: Chikenjars_69 Start: 49939, Stop: 50367, Start Num: 2

Candidate Starts for Chikenjars_69:

(Start: 2 @49939 has 54 MA's), (8, 50032), (18, 50203), (23, 50326),

Gene: Citrus_70 Start: 50200, Stop: 50628, Start Num: 2

Candidate Starts for Citrus_70:

(Start: 2 @50200 has 54 MA's), (8, 50293), (18, 50464), (23, 50587),

Gene: Conley_72 Start: 50234, Stop: 50632, Start Num: 2

Candidate Starts for Conley_72:

(Start: 1 @50222 has 2 MA's), (Start: 2 @50234 has 54 MA's), (12, 50387), (14, 50420), (17, 50456), (20, 50534), (24, 50618),

Gene: Crocheter_71 Start: 49802, Stop: 50230, Start Num: 2

Candidate Starts for Crocheter_71:

(Start: 2 @49802 has 54 MA's), (8, 49895), (18, 50066), (23, 50189), (24, 50216),

Gene: Dancer_74 Start: 49664, Stop: 50062, Start Num: 2
Candidate Starts for Dancer_74:
(Start: 1 @49652 has 2 MA's), (Start: 2 @49664 has 54 MA's), (6, 49712), (11, 49787), (12, 49817),
(14, 49850), (17, 49886), (22, 50015), (23, 50021), (24, 50048),

Gene: Demure_69 Start: 49339, Stop: 49764, Start Num: 2
Candidate Starts for Demure_69:
(Start: 2 @49339 has 54 MA's), (8, 49429), (15, 49564), (17, 49588), (18, 49600), (19, 49627), (23,
49723), (24, 49750),

Gene: Dialga_72 Start: 49921, Stop: 50346, Start Num: 2
Candidate Starts for Dialga_72:
(Start: 2 @49921 has 54 MA's), (8, 50011), (15, 50146), (17, 50170), (18, 50182), (19, 50209), (24,
50332),

Gene: Duffington_70 Start: 49872, Stop: 50300, Start Num: 2
Candidate Starts for Duffington_70:
(Start: 2 @49872 has 54 MA's), (8, 49965), (15, 50100), (18, 50136), (23, 50259),

Gene: Eddiemania_73 Start: 50547, Stop: 50972, Start Num: 2
Candidate Starts for Eddiemania_73:
(Start: 2 @50547 has 54 MA's), (4, 50580), (8, 50637), (15, 50772), (17, 50796), (18, 50808), (19,
50835), (24, 50958),

Gene: EndAve_72 Start: 50094, Stop: 50522, Start Num: 2
Candidate Starts for EndAve_72:
(Start: 2 @50094 has 54 MA's), (8, 50187), (18, 50358), (21, 50463), (23, 50481),

Gene: Fazel_77 Start: 50881, Stop: 51300, Start Num: 2
Candidate Starts for Fazel_77:
(Start: 2 @50881 has 54 MA's), (8, 50977), (10, 51010), (13, 51073), (21, 51253), (23, 51271),

Gene: Figliar_69 Start: 49935, Stop: 50363, Start Num: 2
Candidate Starts for Figliar_69:
(Start: 2 @49935 has 54 MA's), (8, 50028), (15, 50163), (18, 50199), (23, 50322), (24, 50349),

Gene: Football_76 Start: 49555, Stop: 49953, Start Num: 2
Candidate Starts for Football_76:
(Start: 1 @49543 has 2 MA's), (Start: 2 @49555 has 54 MA's), (6, 49603), (11, 49678), (12, 49708),
(14, 49741), (17, 49777), (23, 49912), (24, 49939),

Gene: FortCran_74 Start: 49927, Stop: 50325, Start Num: 2
Candidate Starts for FortCran_74:
(Start: 1 @49915 has 2 MA's), (Start: 2 @49927 has 54 MA's), (6, 49975), (11, 50050), (12, 50080),
(14, 50113), (17, 50149), (22, 50278), (23, 50284), (24, 50311),

Gene: Gill_72 Start: 49596, Stop: 50006, Start Num: 1
Candidate Starts for Gill_72:
(Start: 1 @49596 has 2 MA's), (Start: 2 @49608 has 54 MA's), (6, 49656), (11, 49731), (12, 49761),
(14, 49794), (17, 49830), (23, 49965), (24, 49992),

Gene: Glintora_72 Start: 50527, Stop: 50955, Start Num: 2
Candidate Starts for Glintora_72:

(Start: 2 @50527 has 54 MA's), (8, 50620), (18, 50791), (23, 50914),

Gene: Gravy_71 Start: 49286, Stop: 49684, Start Num: 2

Candidate Starts for Gravy_71:

(Start: 1 @49274 has 2 MA's), (Start: 2 @49286 has 54 MA's), (6, 49334), (11, 49409), (12, 49439), (14, 49472), (17, 49508), (23, 49643), (24, 49670),

Gene: Gusicorn_72 Start: 49709, Stop: 50137, Start Num: 2

Candidate Starts for Gusicorn_72:

(Start: 2 @49709 has 54 MA's), (8, 49802), (18, 49973), (23, 50096), (24, 50123),

Gene: Hortihabitatio_76 Start: 51089, Stop: 51517, Start Num: 2

Candidate Starts for Hortihabitatio_76:

(Start: 2 @51089 has 54 MA's), (8, 51182), (9, 51206), (10, 51215), (13, 51278), (16, 51335), (23, 51476),

Gene: Hydrus_73 Start: 50523, Stop: 50948, Start Num: 2

Candidate Starts for Hydrus_73:

(Start: 2 @50523 has 54 MA's), (8, 50613), (15, 50748), (17, 50772), (18, 50784), (19, 50811), (24, 50934),

Gene: Jodelie19_69 Start: 51102, Stop: 51530, Start Num: 2

Candidate Starts for Jodelie19_69:

(Start: 2 @51102 has 54 MA's), (8, 51195), (15, 51330), (18, 51366), (23, 51489), (24, 51516),

Gene: JulesRay_74 Start: 50276, Stop: 50674, Start Num: 2

Candidate Starts for JulesRay_74:

(Start: 1 @50264 has 2 MA's), (Start: 2 @50276 has 54 MA's), (6, 50324), (11, 50399), (12, 50429), (14, 50462), (17, 50498), (23, 50633), (24, 50660),

Gene: Kenosha_70 Start: 49949, Stop: 50374, Start Num: 2

Candidate Starts for Kenosha_70:

(Start: 2 @49949 has 54 MA's), (4, 49982), (8, 50039), (15, 50174), (17, 50198), (18, 50210), (19, 50237), (24, 50360),

Gene: Kerry_71 Start: 49349, Stop: 49747, Start Num: 2

Candidate Starts for Kerry_71:

(Start: 1 @49337 has 2 MA's), (Start: 2 @49349 has 54 MA's), (6, 49397), (11, 49472), (12, 49502), (14, 49535), (17, 49571), (23, 49706), (24, 49733),

Gene: Luthien_72 Start: 50089, Stop: 50517, Start Num: 2

Candidate Starts for Luthien_72:

(Start: 2 @50089 has 54 MA's), (8, 50182), (18, 50353), (23, 50476),

Gene: Madvan_71 Start: 49411, Stop: 49836, Start Num: 2

Candidate Starts for Madvan_71:

(Start: 2 @49411 has 54 MA's), (4, 49444), (8, 49501), (15, 49636), (17, 49660), (18, 49672), (19, 49699), (24, 49822),

Gene: Magel_73 Start: 49511, Stop: 49921, Start Num: 1

Candidate Starts for Magel_73:

(Start: 1 @49511 has 2 MA's), (Start: 2 @49523 has 54 MA's), (6, 49571), (11, 49646), (12, 49676), (14, 49709), (17, 49745), (23, 49880), (24, 49907),

Gene: MajinBuu_71 Start: 50317, Stop: 50745, Start Num: 2
Candidate Starts for MajinBuu_71:
(Start: 2 @50317 has 54 MA's), (8, 50410), (15, 50545), (18, 50581), (23, 50704), (24, 50731),

Gene: Mossy_74 Start: 51400, Stop: 51828, Start Num: 2
Candidate Starts for Mossy_74:
(Start: 2 @51400 has 54 MA's), (8, 51493), (9, 51517), (10, 51526), (16, 51646), (24, 51814),

Gene: Mysticmoon_75 Start: 51102, Stop: 51518, Start Num: 2
Candidate Starts for Mysticmoon_75:
(Start: 2 @51102 has 54 MA's), (8, 51195), (9, 51219), (10, 51228), (21, 51471),

Gene: Nadmeg_72 Start: 50640, Stop: 51065, Start Num: 2
Candidate Starts for Nadmeg_72:
(Start: 2 @50640 has 54 MA's), (4, 50673), (8, 50730), (15, 50865), (17, 50889), (18, 50901), (19, 50928), (24, 51051),

Gene: Nithya_71 Start: 49795, Stop: 50223, Start Num: 2
Candidate Starts for Nithya_71:
(Start: 2 @49795 has 54 MA's), (8, 49888), (18, 50059), (23, 50182),

Gene: NoPickles_73 Start: 49443, Stop: 49841, Start Num: 2
Candidate Starts for NoPickles_73:
(Start: 1 @49431 has 2 MA's), (Start: 2 @49443 has 54 MA's), (6, 49491), (11, 49566), (12, 49596), (14, 49629), (17, 49665), (23, 49800), (24, 49827),

Gene: Odesza_71 Start: 49467, Stop: 49865, Start Num: 2
Candidate Starts for Odesza_71:
(Start: 1 @49455 has 2 MA's), (Start: 2 @49467 has 54 MA's), (6, 49515), (11, 49590), (12, 49620), (14, 49653), (17, 49689), (23, 49824),

Gene: OhMyWard_70 Start: 51159, Stop: 51587, Start Num: 2
Candidate Starts for OhMyWard_70:
(Start: 2 @51159 has 54 MA's), (8, 51252), (9, 51276), (10, 51285), (16, 51405), (24, 51573),

Gene: OlgasClover_71 Start: 50444, Stop: 50872, Start Num: 2
Candidate Starts for OlgasClover_71:
(Start: 2 @50444 has 54 MA's), (8, 50537), (15, 50672), (18, 50708),

Gene: Perkunas_75 Start: 49660, Stop: 50058, Start Num: 2
Candidate Starts for Perkunas_75:
(Start: 1 @49648 has 2 MA's), (Start: 2 @49660 has 54 MA's), (12, 49813), (14, 49846), (17, 49882), (22, 50011), (24, 50044),

Gene: PestoPenguin_76 Start: 49709, Stop: 50137, Start Num: 2
Candidate Starts for PestoPenguin_76:
(Start: 2 @49709 has 54 MA's), (8, 49802), (18, 49973), (23, 50096), (24, 50123),

Gene: Petito_76 Start: 51180, Stop: 51578, Start Num: 2
Candidate Starts for Petito_76:
(Start: 1 @51168 has 2 MA's), (Start: 2 @51180 has 54 MA's), (12, 51333), (14, 51366), (17, 51402), (20, 51480), (22, 51531), (24, 51564),

Gene: Phepper_72 Start: 49653, Stop: 50078, Start Num: 2

Candidate Starts for Phepper_72:

(Start: 2 @49653 has 54 MA's), (8, 49743), (15, 49878), (17, 49902), (18, 49914), (19, 49941), (24, 50064),

Gene: Pherobrine_74 Start: 51157, Stop: 51573, Start Num: 2

Candidate Starts for Pherobrine_74:

(Start: 2 @51157 has 54 MA's), (8, 51250), (9, 51274), (10, 51283), (16, 51403),

Gene: Rickmore_68 Start: 48311, Stop: 48739, Start Num: 2

Candidate Starts for Rickmore_68:

(Start: 2 @48311 has 54 MA's), (8, 48404), (18, 48575), (23, 48698),

Gene: Roney_72 Start: 49633, Stop: 50031, Start Num: 2

Candidate Starts for Roney_72:

(Start: 1 @49621 has 2 MA's), (Start: 2 @49633 has 54 MA's), (6, 49681), (11, 49756), (12, 49786), (14, 49819), (17, 49855), (23, 49990),

Gene: Runhaar_71 Start: 49462, Stop: 49887, Start Num: 2

Candidate Starts for Runhaar_71:

(Start: 2 @49462 has 54 MA's), (4, 49495), (8, 49552), (15, 49687), (17, 49711), (18, 49723), (19, 49750), (24, 49873),

Gene: Schwartz33_73 Start: 49999, Stop: 50442, Start Num: 2

Candidate Starts for Schwartz33_73:

(Start: 2 @49999 has 54 MA's), (5, 50059), (16, 50239), (23, 50380), (25, 50425),

Gene: Secretariat_72 Start: 49337, Stop: 49789, Start Num: 2

Candidate Starts for Secretariat_72:

(Start: 2 @49337 has 54 MA's), (3, 49361), (16, 49583), (25, 49772), (26, 49775),

Gene: ShaggyRogers_71 Start: 49443, Stop: 49871, Start Num: 2

Candidate Starts for ShaggyRogers_71:

(Start: 2 @49443 has 54 MA's), (8, 49536), (18, 49707), (23, 49830), (24, 49857),

Gene: SweetCrkHerbs_76 Start: 49672, Stop: 50070, Start Num: 2

Candidate Starts for SweetCrkHerbs_76:

(Start: 1 @49660 has 2 MA's), (Start: 2 @49672 has 54 MA's), (12, 49825), (14, 49858), (17, 49894), (24, 50056),

Gene: Tairn4Wing_76 Start: 49765, Stop: 50163, Start Num: 2

Candidate Starts for Tairn4Wing_76:

(Start: 1 @49753 has 2 MA's), (Start: 2 @49765 has 54 MA's), (6, 49813), (11, 49888), (12, 49918), (14, 49951), (17, 49987), (23, 50122), (24, 50149),

Gene: Talon44_76 Start: 50395, Stop: 50793, Start Num: 2

Candidate Starts for Talon44_76:

(Start: 1 @50383 has 2 MA's), (Start: 2 @50395 has 54 MA's), (6, 50443), (11, 50518), (12, 50548), (14, 50581), (17, 50617), (23, 50752), (24, 50779),

Gene: Tanis_72 Start: 49453, Stop: 49851, Start Num: 2

Candidate Starts for Tanis_72:

(Start: 1 @49441 has 2 MA's), (Start: 2 @49453 has 54 MA's), (6, 49501), (11, 49576), (12, 49606), (14, 49639), (17, 49675), (23, 49810), (24, 49837),

Gene: TenaciousP_71 Start: 51064, Stop: 51492, Start Num: 2

Candidate Starts for TenaciousP_71:

(Start: 2 @51064 has 54 MA's), (8, 51157), (15, 51292), (18, 51328), (23, 51451), (24, 51478),

Gene: Tonaltzin_74 Start: 49634, Stop: 50062, Start Num: 2

Candidate Starts for Tonaltzin_74:

(Start: 2 @49634 has 54 MA's), (8, 49727), (15, 49862), (18, 49898), (23, 50021), (24, 50048),

Gene: Trufflozitus_78 Start: 50280, Stop: 50678, Start Num: 2

Candidate Starts for Trufflozitus_78:

(Start: 1 @50268 has 2 MA's), (Start: 2 @50280 has 54 MA's), (6, 50328), (7, 50331), (11, 50403), (12, 50433), (14, 50466), (17, 50502), (23, 50637), (24, 50664),

Gene: Untouchable_73 Start: 50650, Stop: 51075, Start Num: 2

Candidate Starts for Untouchable_73:

(Start: 2 @50650 has 54 MA's), (8, 50740), (15, 50875), (17, 50899), (18, 50911), (19, 50938), (24, 51061),

Gene: Vardy_70 Start: 49352, Stop: 49777, Start Num: 2

Candidate Starts for Vardy_70:

(Start: 2 @49352 has 54 MA's), (4, 49385), (8, 49442), (15, 49577), (17, 49601), (18, 49613), (24, 49763),

Gene: Zeph_73 Start: 50490, Stop: 50915, Start Num: 2

Candidate Starts for Zeph_73:

(Start: 2 @50490 has 54 MA's), (8, 50580), (15, 50715), (17, 50739), (18, 50751), (19, 50778), (24, 50901),