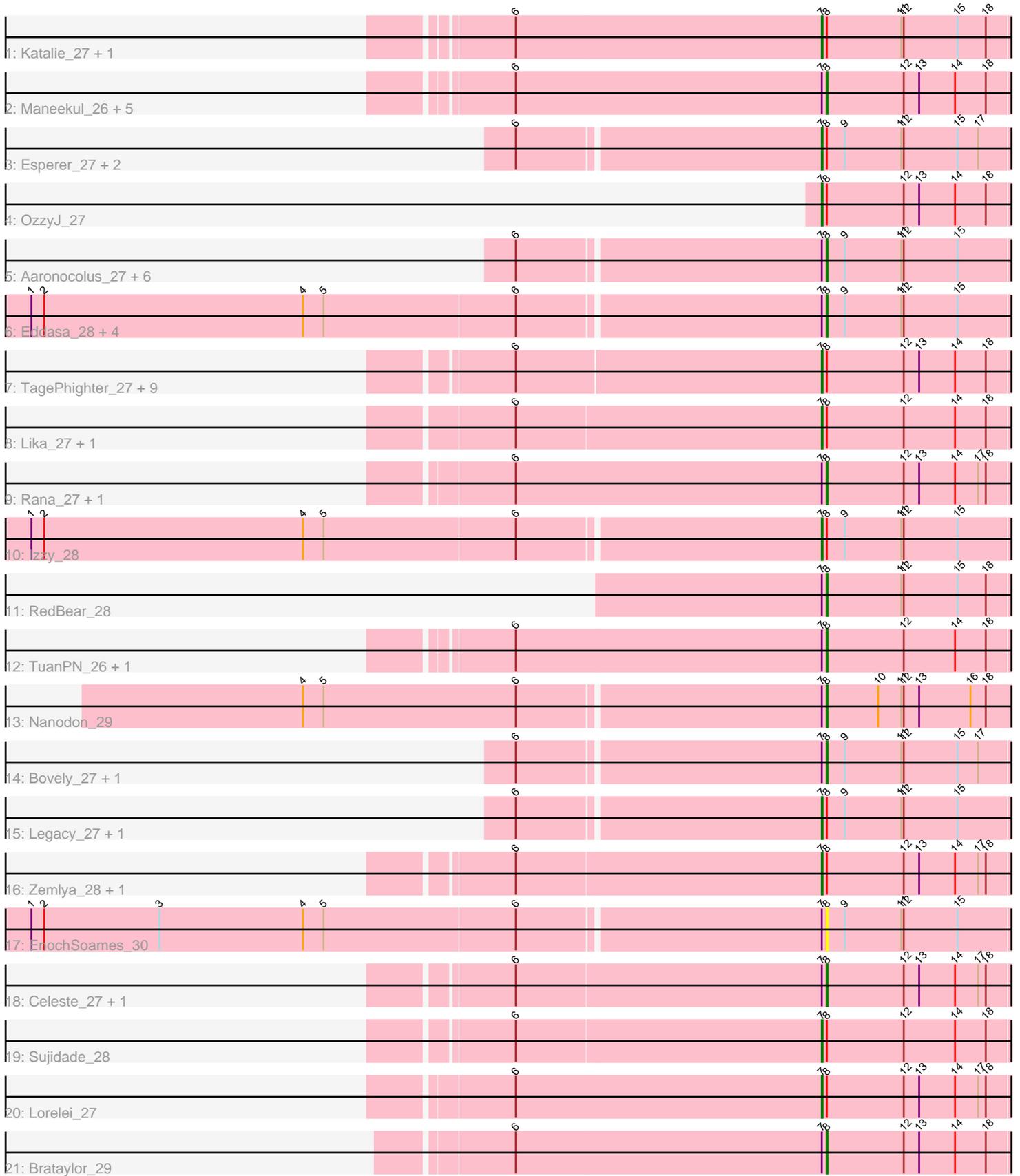


Pham 291214



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 291214 Report

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

Pham number 291214 has 55 members, 1 are drafts.

Phages represented in each track:

- Track 1 : Katalie_27, South40_27
- Track 2 : Maneekul_26, Emaanora_28, Yasdnil_26, Asten_26, Goby_27, Toma_27
- Track 3 : Esperer_27, Indigo_26, Nerdos_27
- Track 4 : OzzyJ_27
- Track 5 : Aaronocolus_27, Caliburn_27, Phettuccine_27, Hydra_29, BeardedLady_28, Leviticus_27, Ozzie_27
- Track 6 : Eddasa_28, Jash_28, Oliynyk_28, BryanRecycles_28, Rusticus_28
- Track 7 : TagePhighter_27, BarryBee_28, Triste_26, Hippo_26, Werner_26, Dwayne_26, SarahRose_26, Whatever_26, Chucky_26, Snorlax_26
- Track 8 : Lika_27, Godpower_28
- Track 9 : Rana_27, Nabi_27
- Track 10 : Izzy_28
- Track 11 : RedBear_28
- Track 12 : TuanPN_26, Ejemplo_26
- Track 13 : Nanodon_29
- Track 14 : Bovely_27, SunsetPointe_27
- Track 15 : Legacy_27, Unstoppable_27
- Track 16 : Zemlya_28, Danzina_28
- Track 17 : EnochSoames_30
- Track 18 : Celeste_27, Dattran_28
- Track 19 : Sujidade_28
- Track 20 : Lorelei_27
- Track 21 : Brataylor_29

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

The start number called the most often in the published annotations is 8, it was called in 29 of the 54 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Aaronocolus_27, Asten_26, BeardedLady_28, Bovely_27, Brataylor_29, BryanRecycles_28, Caliburn_27, Celeste_27, Dattran_28, Eddasa_28, Ejemplo_26, Emaanora_28, EnochSoames_30, Goby_27, Hydra_29, Jash_28, Leviticus_27, Maneekul_26, Nabi_27, Nanodon_29, Oliynyk_28, Ozzie_27, Phettuccine_27,

Rana_27, RedBear_28, Rusticus_28, SunsetPointe_27, Toma_27, TuanPN_26, Yasdnil_26,

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

- BarryBee_28, Chucky_26, Danzina_28, Dwayne_26, Esperer_27, Godpower_28, Hippo_26, Indigo_26, Izzy_28, Katalie_27, Legacy_27, Lika_27, Lorelei_27, Nerdos_27, OzzyJ_27, SarahRose_26, Snorlax_26, South40_27, Sujidade_28, TagePhighter_27, Triste_26, Unstoppable_27, Werner_26, Whatever_26, Zemlya_28,

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

-

Summary by start number:

Start 7:

- Found in 55 of 55 (100.0%) of genes in pham
- Manual Annotations of this start: 25 of 54
- Called 45.5% of time when present
- Phage (with cluster) where this start called: BarryBee_28 (BD1), Chucky_26 (BD1), Danzina_28 (BD1), Dwayne_26 (BD1), Esperer_27 (BD1), Godpower_28 (BD1), Hippo_26 (BD1), Indigo_26 (BD1), Izzy_28 (BD1), Katalie_27 (BD1), Legacy_27 (BD1), Lika_27 (BD1), Lorelei_27 (BD1), Nerdos_27 (BD1), OzzyJ_27 (BD1), SarahRose_26 (BD1), Snorlax_26 (BD1), South40_27 (BD1), Sujidade_28 (BD1), TagePhighter_27 (BD1), Triste_26 (BD1), Unstoppable_27 (BD1), Werner_26 (BD1), Whatever_26 (BD1), Zemlya_28 (BD1),

Start 8:

- Found in 55 of 55 (100.0%) of genes in pham
- Manual Annotations of this start: 29 of 54
- Called 54.5% of time when present
- Phage (with cluster) where this start called: Aaronocolus_27 (BD1), Asten_26 (BD1), BeardedLady_28 (BD1), Bovely_27 (BD1), Brataylor_29 (BD1), BryanRecycles_28 (BD1), Caliburn_27 (BD1), Celeste_27 (BD1), Dattran_28 (BD1), Eddasa_28 (BD1), Ejemplo_26 (BD1), Emaanora_28 (BD1), EnochSoames_30 (BD1), Goby_27 (BD1), Hydra_29 (BD1), Jash_28 (BD1), Leviticus_27 (BD1), Maneekul_26 (BD1), Nabi_27 (BD1), Nanodon_29 (BD1), Oliynyk_28 (BD1), Ozzie_27 (BD1), Phettuccine_27 (BD1), Rana_27 (BD1), RedBear_28 (BD1), Rusticus_28 (BD1), SunsetPointe_27 (BD1), Toma_27 (BD1), TuanPN_26 (BD1), Yasdnil_26 (BD1),

Summary by clusters:

There is one cluster represented in this pham: BD1

Info for manual annotations of cluster BD1:

- Start number 7 was manually annotated 25 times for cluster BD1.
- Start number 8 was manually annotated 29 times for cluster BD1.

Gene Information:

Gene: Aaronocolus_27 Start: 21931, Stop: 22191, Start Num: 8
Candidate Starts for Aaronocolus_27:

(6, 21580), (Start: 7 @21925 has 25 MA's), (Start: 8 @21931 has 29 MA's), (9, 21952), (11, 22018), (12, 22021), (15, 22084),

Gene: Asten_26 Start: 22171, Stop: 22434, Start Num: 8

Candidate Starts for Asten_26:

(6, 21811), (Start: 7 @22165 has 25 MA's), (Start: 8 @22171 has 29 MA's), (12, 22261), (13, 22279), (14, 22321), (18, 22357),

Gene: BarryBee_28 Start: 22175, Stop: 22444, Start Num: 7

Candidate Starts for BarryBee_28:

(6, 21821), (Start: 7 @22175 has 25 MA's), (Start: 8 @22181 has 29 MA's), (12, 22271), (13, 22289), (14, 22331), (18, 22367),

Gene: BeardedLady_28 Start: 22184, Stop: 22444, Start Num: 8

Candidate Starts for BeardedLady_28:

(6, 21833), (Start: 7 @22178 has 25 MA's), (Start: 8 @22184 has 29 MA's), (9, 22205), (11, 22271), (12, 22274), (15, 22337),

Gene: Bovely_27 Start: 21937, Stop: 22197, Start Num: 8

Candidate Starts for Bovely_27:

(6, 21586), (Start: 7 @21931 has 25 MA's), (Start: 8 @21937 has 29 MA's), (9, 21958), (11, 22024), (12, 22027), (15, 22090), (17, 22114),

Gene: Brataylor_29 Start: 23190, Stop: 23453, Start Num: 8

Candidate Starts for Brataylor_29:

(6, 22827), (Start: 7 @23184 has 25 MA's), (Start: 8 @23190 has 29 MA's), (12, 23280), (13, 23298), (14, 23340), (18, 23376),

Gene: BryanRecycles_28 Start: 22288, Stop: 22548, Start Num: 8

Candidate Starts for BryanRecycles_28:

(1, 21373), (2, 21388), (4, 21691), (5, 21715), (6, 21937), (Start: 7 @22282 has 25 MA's), (Start: 8 @22288 has 29 MA's), (9, 22309), (11, 22375), (12, 22378), (15, 22441),

Gene: Caliburn_27 Start: 21914, Stop: 22174, Start Num: 8

Candidate Starts for Caliburn_27:

(6, 21563), (Start: 7 @21908 has 25 MA's), (Start: 8 @21914 has 29 MA's), (9, 21935), (11, 22001), (12, 22004), (15, 22067),

Gene: Celeste_27 Start: 22637, Stop: 22900, Start Num: 8

Candidate Starts for Celeste_27:

(6, 22277), (Start: 7 @22631 has 25 MA's), (Start: 8 @22637 has 29 MA's), (12, 22727), (13, 22745), (14, 22787), (17, 22814), (18, 22823),

Gene: Chucky_26 Start: 22179, Stop: 22448, Start Num: 7

Candidate Starts for Chucky_26:

(6, 21825), (Start: 7 @22179 has 25 MA's), (Start: 8 @22185 has 29 MA's), (12, 22275), (13, 22293), (14, 22335), (18, 22371),

Gene: Danzina_28 Start: 22932, Stop: 23201, Start Num: 7

Candidate Starts for Danzina_28:

(6, 22578), (Start: 7 @22932 has 25 MA's), (Start: 8 @22938 has 29 MA's), (12, 23028), (13, 23046), (14, 23088), (17, 23115), (18, 23124),

Gene: Dattran_28 Start: 22747, Stop: 23010, Start Num: 8

Candidate Starts for Dattran_28:

(6, 22387), (Start: 7 @22741 has 25 MA's), (Start: 8 @22747 has 29 MA's), (12, 22837), (13, 22855), (14, 22897), (17, 22924), (18, 22933),

Gene: Dwayne_26 Start: 22166, Stop: 22435, Start Num: 7

Candidate Starts for Dwayne_26:

(6, 21812), (Start: 7 @22166 has 25 MA's), (Start: 8 @22172 has 29 MA's), (12, 22262), (13, 22280), (14, 22322), (18, 22358),

Gene: Eddasa_28 Start: 22288, Stop: 22548, Start Num: 8

Candidate Starts for Eddasa_28:

(1, 21373), (2, 21388), (4, 21691), (5, 21715), (6, 21937), (Start: 7 @22282 has 25 MA's), (Start: 8 @22288 has 29 MA's), (9, 22309), (11, 22375), (12, 22378), (15, 22441),

Gene: Ejemplo_26 Start: 22207, Stop: 22467, Start Num: 8

Candidate Starts for Ejemplo_26:

(6, 21844), (Start: 7 @22201 has 25 MA's), (Start: 8 @22207 has 29 MA's), (12, 22297), (14, 22357), (18, 22393),

Gene: Emaanora_28 Start: 22130, Stop: 22393, Start Num: 8

Candidate Starts for Emaanora_28:

(6, 21770), (Start: 7 @22124 has 25 MA's), (Start: 8 @22130 has 29 MA's), (12, 22220), (13, 22238), (14, 22280), (18, 22316),

Gene: EnochSoames_30 Start: 22283, Stop: 22543, Start Num: 8

Candidate Starts for EnochSoames_30:

(1, 21368), (2, 21383), (3, 21518), (4, 21686), (5, 21710), (6, 21932), (Start: 7 @22277 has 25 MA's), (Start: 8 @22283 has 29 MA's), (9, 22304), (11, 22370), (12, 22373), (15, 22436),

Gene: Esperer_27 Start: 21744, Stop: 22010, Start Num: 7

Candidate Starts for Esperer_27:

(6, 21399), (Start: 7 @21744 has 25 MA's), (Start: 8 @21750 has 29 MA's), (9, 21771), (11, 21837), (12, 21840), (15, 21903), (17, 21927),

Gene: Goby_27 Start: 22752, Stop: 23015, Start Num: 8

Candidate Starts for Goby_27:

(6, 22392), (Start: 7 @22746 has 25 MA's), (Start: 8 @22752 has 29 MA's), (12, 22842), (13, 22860), (14, 22902), (18, 22938),

Gene: Godpower_28 Start: 22745, Stop: 23014, Start Num: 7

Candidate Starts for Godpower_28:

(6, 22391), (Start: 7 @22745 has 25 MA's), (Start: 8 @22751 has 29 MA's), (12, 22841), (14, 22901), (18, 22937),

Gene: Hippo_26 Start: 22175, Stop: 22444, Start Num: 7

Candidate Starts for Hippo_26:

(6, 21821), (Start: 7 @22175 has 25 MA's), (Start: 8 @22181 has 29 MA's), (12, 22271), (13, 22289), (14, 22331), (18, 22367),

Gene: Hydra_29 Start: 22462, Stop: 22722, Start Num: 8

Candidate Starts for Hydra_29:

(6, 22111), (Start: 7 @22456 has 25 MA's), (Start: 8 @22462 has 29 MA's), (9, 22483), (11, 22549), (12, 22552), (15, 22615),

Gene: Indigo_26 Start: 21924, Stop: 22190, Start Num: 7

Candidate Starts for Indigo_26:

(6, 21579), (Start: 7 @21924 has 25 MA's), (Start: 8 @21930 has 29 MA's), (9, 21951), (11, 22017), (12, 22020), (15, 22083), (17, 22107),

Gene: Izzy_28 Start: 22329, Stop: 22595, Start Num: 7

Candidate Starts for Izzy_28:

(1, 21420), (2, 21435), (4, 21738), (5, 21762), (6, 21984), (Start: 7 @22329 has 25 MA's), (Start: 8 @22335 has 29 MA's), (9, 22356), (11, 22422), (12, 22425), (15, 22488),

Gene: Jash_28 Start: 22288, Stop: 22548, Start Num: 8

Candidate Starts for Jash_28:

(1, 21373), (2, 21388), (4, 21691), (5, 21715), (6, 21937), (Start: 7 @22282 has 25 MA's), (Start: 8 @22288 has 29 MA's), (9, 22309), (11, 22375), (12, 22378), (15, 22441),

Gene: Katalie_27 Start: 22461, Stop: 22727, Start Num: 7

Candidate Starts for Katalie_27:

(6, 22104), (Start: 7 @22461 has 25 MA's), (Start: 8 @22467 has 29 MA's), (11, 22554), (12, 22557), (15, 22620), (18, 22653),

Gene: Legacy_27 Start: 21899, Stop: 22165, Start Num: 7

Candidate Starts for Legacy_27:

(6, 21554), (Start: 7 @21899 has 25 MA's), (Start: 8 @21905 has 29 MA's), (9, 21926), (11, 21992), (12, 21995), (15, 22058),

Gene: Leviticus_27 Start: 21934, Stop: 22194, Start Num: 8

Candidate Starts for Leviticus_27:

(6, 21583), (Start: 7 @21928 has 25 MA's), (Start: 8 @21934 has 29 MA's), (9, 21955), (11, 22021), (12, 22024), (15, 22087),

Gene: Lika_27 Start: 22749, Stop: 23018, Start Num: 7

Candidate Starts for Lika_27:

(6, 22395), (Start: 7 @22749 has 25 MA's), (Start: 8 @22755 has 29 MA's), (12, 22845), (14, 22905), (18, 22941),

Gene: Lorelei_27 Start: 22718, Stop: 22987, Start Num: 7

Candidate Starts for Lorelei_27:

(6, 22361), (Start: 7 @22718 has 25 MA's), (Start: 8 @22724 has 29 MA's), (12, 22814), (13, 22832), (14, 22874), (17, 22901), (18, 22910),

Gene: Maneekul_26 Start: 22206, Stop: 22466, Start Num: 8

Candidate Starts for Maneekul_26:

(6, 21843), (Start: 7 @22200 has 25 MA's), (Start: 8 @22206 has 29 MA's), (12, 22296), (13, 22314), (14, 22356), (18, 22392),

Gene: Nabi_27 Start: 22724, Stop: 22987, Start Num: 8

Candidate Starts for Nabi_27:

(6, 22361), (Start: 7 @22718 has 25 MA's), (Start: 8 @22724 has 29 MA's), (12, 22814), (13, 22832), (14, 22874), (17, 22901), (18, 22910),

Gene: Nanodon_29 Start: 22564, Stop: 22827, Start Num: 8

Candidate Starts for Nanodon_29:

(4, 21964), (5, 21988), (6, 22213), (Start: 7 @22558 has 25 MA's), (Start: 8 @22564 has 29 MA's), (10, 22624), (11, 22651), (12, 22654), (13, 22672), (16, 22732), (18, 22750),

Gene: Nerdos_27 Start: 21922, Stop: 22188, Start Num: 7

Candidate Starts for Nerdos_27:

(6, 21577), (Start: 7 @21922 has 25 MA's), (Start: 8 @21928 has 29 MA's), (9, 21949), (11, 22015), (12, 22018), (15, 22081), (17, 22105),

Gene: Oliynyk_28 Start: 22288, Stop: 22548, Start Num: 8

Candidate Starts for Oliynyk_28:

(1, 21373), (2, 21388), (4, 21691), (5, 21715), (6, 21937), (Start: 7 @22282 has 25 MA's), (Start: 8 @22288 has 29 MA's), (9, 22309), (11, 22375), (12, 22378), (15, 22441),

Gene: Ozzie_27 Start: 21914, Stop: 22174, Start Num: 8

Candidate Starts for Ozzie_27:

(6, 21563), (Start: 7 @21908 has 25 MA's), (Start: 8 @21914 has 29 MA's), (9, 21935), (11, 22001), (12, 22004), (15, 22067),

Gene: OzzyJ_27 Start: 22166, Stop: 22435, Start Num: 7

Candidate Starts for OzzyJ_27:

(Start: 7 @22166 has 25 MA's), (Start: 8 @22172 has 29 MA's), (12, 22262), (13, 22280), (14, 22322), (18, 22358),

Gene: Phettuccine_27 Start: 21930, Stop: 22190, Start Num: 8

Candidate Starts for Phettuccine_27:

(6, 21579), (Start: 7 @21924 has 25 MA's), (Start: 8 @21930 has 29 MA's), (9, 21951), (11, 22017), (12, 22020), (15, 22083),

Gene: Rana_27 Start: 22724, Stop: 22987, Start Num: 8

Candidate Starts for Rana_27:

(6, 22361), (Start: 7 @22718 has 25 MA's), (Start: 8 @22724 has 29 MA's), (12, 22814), (13, 22832), (14, 22874), (17, 22901), (18, 22910),

Gene: RedBear_28 Start: 22467, Stop: 22727, Start Num: 8

Candidate Starts for RedBear_28:

(Start: 7 @22461 has 25 MA's), (Start: 8 @22467 has 29 MA's), (11, 22554), (12, 22557), (15, 22620), (18, 22653),

Gene: Rusticus_28 Start: 22288, Stop: 22548, Start Num: 8

Candidate Starts for Rusticus_28:

(1, 21373), (2, 21388), (4, 21691), (5, 21715), (6, 21937), (Start: 7 @22282 has 25 MA's), (Start: 8 @22288 has 29 MA's), (9, 22309), (11, 22375), (12, 22378), (15, 22441),

Gene: SarahRose_26 Start: 22175, Stop: 22444, Start Num: 7

Candidate Starts for SarahRose_26:

(6, 21821), (Start: 7 @22175 has 25 MA's), (Start: 8 @22181 has 29 MA's), (12, 22271), (13, 22289), (14, 22331), (18, 22367),

Gene: Snorlax_26 Start: 22178, Stop: 22447, Start Num: 7

Candidate Starts for Snorlax_26:

(6, 21824), (Start: 7 @22178 has 25 MA's), (Start: 8 @22184 has 29 MA's), (12, 22274), (13, 22292), (14, 22334), (18, 22370),

Gene: South40_27 Start: 22461, Stop: 22727, Start Num: 7

Candidate Starts for South40_27:

(6, 22104), (Start: 7 @22461 has 25 MA's), (Start: 8 @22467 has 29 MA's), (11, 22554), (12, 22557), (15, 22620), (18, 22653),

Gene: Sujidade_28 Start: 23034, Stop: 23303, Start Num: 7

Candidate Starts for Sujidade_28:

(6, 22680), (Start: 7 @23034 has 25 MA's), (Start: 8 @23040 has 29 MA's), (12, 23130), (14, 23190), (18, 23226),

Gene: SunsetPointe_27 Start: 21921, Stop: 22181, Start Num: 8

Candidate Starts for SunsetPointe_27:

(6, 21570), (Start: 7 @21915 has 25 MA's), (Start: 8 @21921 has 29 MA's), (9, 21942), (11, 22008), (12, 22011), (15, 22074), (17, 22098),

Gene: TagePhighter_27 Start: 22178, Stop: 22447, Start Num: 7

Candidate Starts for TagePhighter_27:

(6, 21824), (Start: 7 @22178 has 25 MA's), (Start: 8 @22184 has 29 MA's), (12, 22274), (13, 22292), (14, 22334), (18, 22370),

Gene: Toma_27 Start: 22752, Stop: 23015, Start Num: 8

Candidate Starts for Toma_27:

(6, 22392), (Start: 7 @22746 has 25 MA's), (Start: 8 @22752 has 29 MA's), (12, 22842), (13, 22860), (14, 22902), (18, 22938),

Gene: Triste_26 Start: 22166, Stop: 22435, Start Num: 7

Candidate Starts for Triste_26:

(6, 21812), (Start: 7 @22166 has 25 MA's), (Start: 8 @22172 has 29 MA's), (12, 22262), (13, 22280), (14, 22322), (18, 22358),

Gene: TuanPN_26 Start: 22207, Stop: 22467, Start Num: 8

Candidate Starts for TuanPN_26:

(6, 21844), (Start: 7 @22201 has 25 MA's), (Start: 8 @22207 has 29 MA's), (12, 22297), (14, 22357), (18, 22393),

Gene: Unstoppable_27 Start: 21919, Stop: 22185, Start Num: 7

Candidate Starts for Unstoppable_27:

(6, 21574), (Start: 7 @21919 has 25 MA's), (Start: 8 @21925 has 29 MA's), (9, 21946), (11, 22012), (12, 22015), (15, 22078),

Gene: Werner_26 Start: 22176, Stop: 22445, Start Num: 7

Candidate Starts for Werner_26:

(6, 21822), (Start: 7 @22176 has 25 MA's), (Start: 8 @22182 has 29 MA's), (12, 22272), (13, 22290), (14, 22332), (18, 22368),

Gene: Whatever_26 Start: 22176, Stop: 22445, Start Num: 7

Candidate Starts for Whatever_26:

(6, 21822), (Start: 7 @22176 has 25 MA's), (Start: 8 @22182 has 29 MA's), (12, 22272), (13, 22290), (14, 22332), (18, 22368),

Gene: Yasdnii_26 Start: 22203, Stop: 22463, Start Num: 8

Candidate Starts for Yasdnii_26:

(6, 21840), (Start: 7 @22197 has 25 MA's), (Start: 8 @22203 has 29 MA's), (12, 22293), (13, 22311), (14, 22353), (18, 22389),

Gene: Zemlya_28 Start: 22738, Stop: 23007, Start Num: 7

Candidate Starts for Zemlya_28:

(6, 22384), (Start: 7 @22738 has 25 MA's), (Start: 8 @22744 has 29 MA's), (12, 22834), (13, 22852), (14, 22894), (17, 22921), (18, 22930),