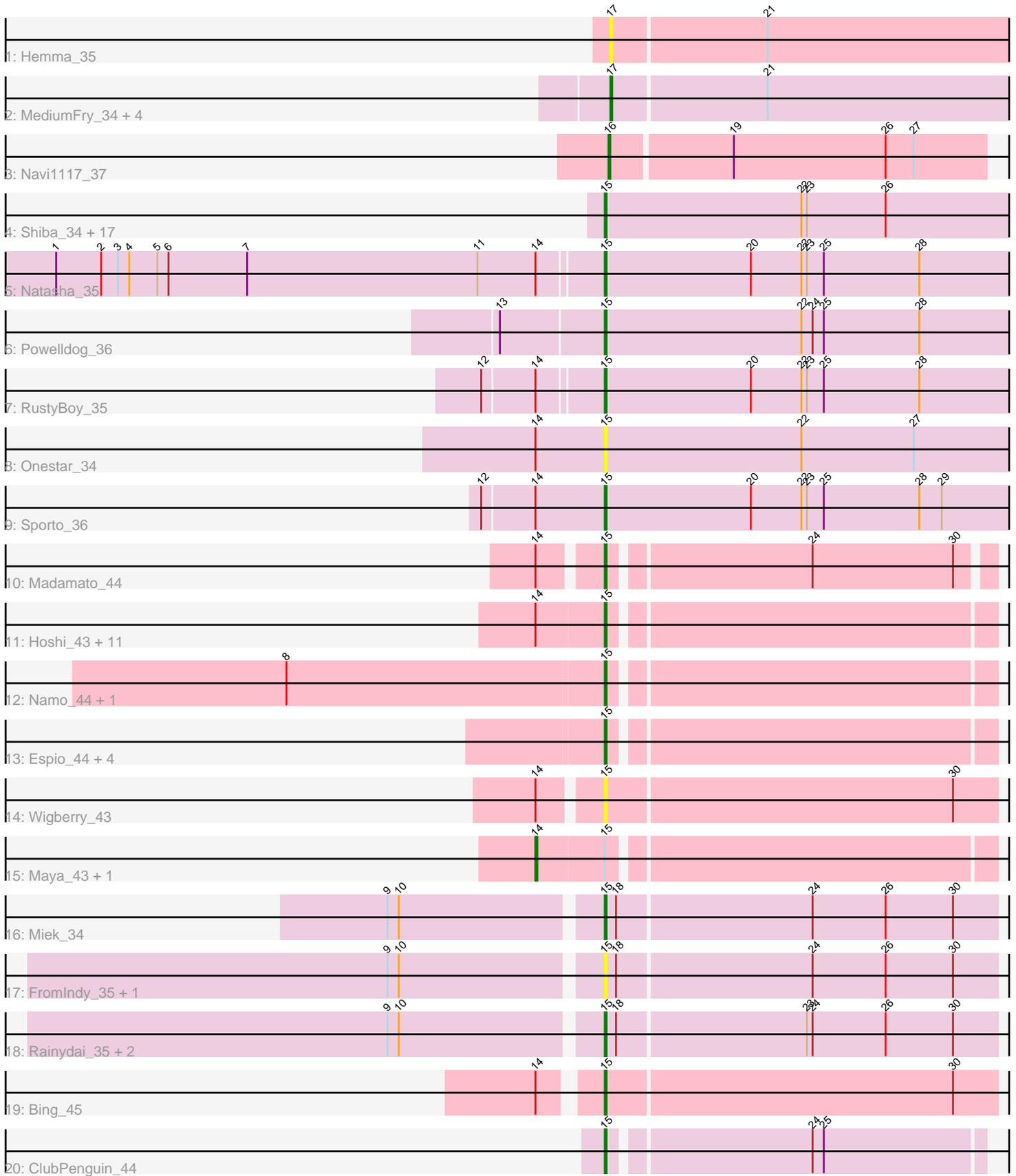


Pham 287916



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 287916 Report

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

Pham number 287916 has 61 members, 10 are drafts.

Phages represented in each track:

- Track 1 : Hemma_35
- Track 2 : MediumFry_34, Loretta_38, Ingrid_38, Zippen_37, Inked_38
- Track 3 : Navi1117_37
- Track 4 : Shiba_34, Egad_34, Linda_34, Sloopyjoe_34, HerbBucket_33, Djungelskog_34, Spain_34, DoctorPepper_34, Boog_34, ProfFrink_34, Jeremy4pt0_34, MrAaronian_34, Raunak_35, Stayer_34, Salk_34, BronxBay_34, Michelle_34, StarLord_34
- Track 5 : Natasha_35
- Track 6 : Powelldog_36
- Track 7 : RustyBoy_35
- Track 8 : Onestar_34
- Track 9 : Sporto_36
- Track 10 : Madamato_44
- Track 11 : Hoshi_43, OlympicHelado_43, Esketit_43, Spectropatronm_43, Indigenous_43, TieDye_42, CherryBlossom_43, IceWarrior_42, TaidaOne_43, FidgetOrca_43, HazuAndZazu_42, TonyStarch_42
- Track 12 : Namu_44, Rima_44
- Track 13 : Espio_44, Popy_43, FrodoSwaggins_43, Soshi_42, DrGrey_42
- Track 14 : Wigberry_43
- Track 15 : Maya_43, Jaylociraptor_43
- Track 16 : Miek_34
- Track 17 : FromIndy_35, Regigigas_36
- Track 18 : Rainydai_35, CricKo_35, Thiqqums_35
- Track 19 : Bing_45
- Track 20 : ClubPenguin_44

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

The start number called the most often in the published annotations is 15, it was called in 43 of the 51 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Bing_45, Boog_34, BronxBay_34, CherryBlossom_43, ClubPenguin_44, CricKo_35, Djungelskog_34, DoctorPepper_34, DrGrey_42, Egad_34, Esketit_43, Espio_44,

FidgetOrca_43, FrodoSwaggins_43, FromIndy_35, HazuAndZazu_42, HerbBucket_33, Hoshi_43, IceWarrior_42, Indigenous_43, Jeremy4pt0_34, Linda_34, Madamoto_44, Michelle_34, Miek_34, MrAaronian_34, Namu_44, Natasha_35, OlympicHelado_43, Onestar_34, Popy_43, Powelldog_36, ProfFrink_34, Rainydai_35, Raunak_35, Regigigas_36, Rima_44, RustyBoy_35, Salk_34, Shiba_34, Sloopyjoe_34, Soshi_42, Spain_34, Spectropatronm_43, Sporto_36, StarLord_34, Stayer_34, TaidaOne_43, Thiqqums_35, TieDye_42, TonyStarch_42, Wigberry_43,

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

- Jaylociraptor_43, Maya_43,

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

- Hemma_35, Ingrid_38, Inked_38, Loretta_38, MediumFry_34, Navi1117_37, Zippen_37,

Summary by start number:

Start 14:

- Found in 21 of 61 (34.4%) of genes in pham
- Manual Annotations of this start: 2 of 51
- Called 9.5% of time when present
- Phage (with cluster) where this start called: Jaylociraptor_43 (BI1), Maya_43 (BI1),

Start 15:

- Found in 54 of 61 (88.5%) of genes in pham
- Manual Annotations of this start: 43 of 51
- Called 96.3% of time when present
- Phage (with cluster) where this start called: Bing_45 (BI5), Boog_34 (AW), BronxBay_34 (AW), CherryBlossom_43 (BI1), ClubPenguin_44 (BI7), CricKo_35 (BI4), Djungelskog_34 (AW), DoctorPepper_34 (AW), DrGrey_42 (BI1), Egad_34 (AW), Esketit_43 (BI1), Espio_44 (BI1), FidgetOrca_43 (BI1), FrodoSwaggins_43 (BI1), FromIndy_35 (BI4), HazuAndZazu_42 (BI1), HerbBucket_33 (AW), Hoshi_43 (BI1), IceWarrior_42 (BI1), Indigenous_43 (BI1), Jeremy4pt0_34 (AW), Linda_34 (AW), Madamoto_44 (BI1), Michelle_34 (AW), Miek_34 (BI4), MrAaronian_34 (AW), Namu_44 (BI1), Natasha_35 (AW), OlympicHelado_43 (BI1), Onestar_34 (AW), Popy_43 (BI1), Powelldog_36 (AW), ProfFrink_34 (AW), Rainydai_35 (BI4), Raunak_35 (AW), Regigigas_36 (BI4), Rima_44 (BI1), RustyBoy_35 (AW), Salk_34 (AW), Shiba_34 (AW), Sloopyjoe_34 (AW), Soshi_42 (BI1), Spain_34 (AW), Spectropatronm_43 (BI1), Sporto_36 (AW), StarLord_34 (AW), Stayer_34 (AW), TaidaOne_43 (BI1), Thiqqums_35 (BI4), TieDye_42 (BI1), TonyStarch_42 (BI1), Wigberry_43 (BI1),

Start 16:

- Found in 1 of 61 (1.6%) of genes in pham
- Manual Annotations of this start: 1 of 51
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Navi1117_37 (AU6),

Start 17:

- Found in 6 of 61 (9.8%) of genes in pham
- Manual Annotations of this start: 5 of 51
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Hemma_35 (AU1), Ingrid_38 (AU3), Inked_38 (AU7), Loretta_38 (AU3), MediumFry_34 (AU4), Zippen_37 (AU7),

Summary by clusters:

There are 10 clusters represented in this pham: AU7, AU1, AU3, AU4, AW, AU6, BI7, BI4, BI5, BI1,

Info for manual annotations of cluster AU3:

- Start number 17 was manually annotated 2 times for cluster AU3.

Info for manual annotations of cluster AU4:

- Start number 17 was manually annotated 1 time for cluster AU4.

Info for manual annotations of cluster AU6:

- Start number 16 was manually annotated 1 time for cluster AU6.

Info for manual annotations of cluster AU7:

- Start number 17 was manually annotated 2 times for cluster AU7.

Info for manual annotations of cluster AW:

- Start number 15 was manually annotated 18 times for cluster AW.

Info for manual annotations of cluster BI1:

- Start number 14 was manually annotated 2 times for cluster BI1.
- Start number 15 was manually annotated 19 times for cluster BI1.

Info for manual annotations of cluster BI4:

- Start number 15 was manually annotated 4 times for cluster BI4.

Info for manual annotations of cluster BI5:

- Start number 15 was manually annotated 1 time for cluster BI5.

Info for manual annotations of cluster BI7:

- Start number 15 was manually annotated 1 time for cluster BI7.

Gene Information:

Gene: Bing_45 Start: 30261, Stop: 30467, Start Num: 15

Candidate Starts for Bing_45:

(Start: 14 @30234 has 2 MA's), (Start: 15 @30261 has 43 MA's), (30, 30444),

Gene: Boog_34 Start: 27091, Stop: 27330, Start Num: 15

Candidate Starts for Boog_34:

(Start: 15 @27091 has 43 MA's), (22, 27196), (23, 27199), (26, 27241),

Gene: BronxBay_34 Start: 27090, Stop: 27329, Start Num: 15

Candidate Starts for BronxBay_34:

(Start: 15 @27090 has 43 MA's), (22, 27195), (23, 27198), (26, 27240),

Gene: CherryBlossom_43 Start: 29659, Stop: 29856, Start Num: 15
Candidate Starts for CherryBlossom_43:
(Start: 14 @29623 has 2 MA's), (Start: 15 @29659 has 43 MA's),

Gene: ClubPenguin_44 Start: 29840, Stop: 30031, Start Num: 15
Candidate Starts for ClubPenguin_44:
(Start: 15 @29840 has 43 MA's), (24, 29942), (25, 29948),

Gene: CricKo_35 Start: 27119, Stop: 27325, Start Num: 15
Candidate Starts for CricKo_35:
(9, 27011), (10, 27017), (Start: 15 @27119 has 43 MA's), (18, 27125), (23, 27224), (24, 27227), (26, 27266), (30, 27302),

Gene: Djungelskog_34 Start: 27090, Stop: 27329, Start Num: 15
Candidate Starts for Djungelskog_34:
(Start: 15 @27090 has 43 MA's), (22, 27195), (23, 27198), (26, 27240),

Gene: DoctorPepper_34 Start: 27090, Stop: 27329, Start Num: 15
Candidate Starts for DoctorPepper_34:
(Start: 15 @27090 has 43 MA's), (22, 27195), (23, 27198), (26, 27240),

Gene: DrGrey_42 Start: 29999, Stop: 30196, Start Num: 15
Candidate Starts for DrGrey_42:
(Start: 15 @29999 has 43 MA's),

Gene: Egad_34 Start: 27091, Stop: 27330, Start Num: 15
Candidate Starts for Egad_34:
(Start: 15 @27091 has 43 MA's), (22, 27196), (23, 27199), (26, 27241),

Gene: Esketit_43 Start: 29736, Stop: 29933, Start Num: 15
Candidate Starts for Esketit_43:
(Start: 14 @29700 has 2 MA's), (Start: 15 @29736 has 43 MA's),

Gene: Espio_44 Start: 30394, Stop: 30591, Start Num: 15
Candidate Starts for Espio_44:
(Start: 15 @30394 has 43 MA's),

Gene: FidgetOrca_43 Start: 29741, Stop: 29938, Start Num: 15
Candidate Starts for FidgetOrca_43:
(Start: 14 @29705 has 2 MA's), (Start: 15 @29741 has 43 MA's),

Gene: FrodoSwaggins_43 Start: 30393, Stop: 30590, Start Num: 15
Candidate Starts for FrodoSwaggins_43:
(Start: 15 @30393 has 43 MA's),

Gene: FromIndy_35 Start: 26723, Stop: 26929, Start Num: 15
Candidate Starts for FromIndy_35:
(9, 26615), (10, 26621), (Start: 15 @26723 has 43 MA's), (18, 26729), (24, 26831), (26, 26870), (30, 26906),

Gene: HazuAndZazu_42 Start: 29995, Stop: 30192, Start Num: 15
Candidate Starts for HazuAndZazu_42:
(Start: 14 @29959 has 2 MA's), (Start: 15 @29995 has 43 MA's),

Gene: Hemma_35 Start: 26922, Stop: 27155, Start Num: 17

Candidate Starts for Hemma_35:

(Start: 17 @26922 has 5 MA's), (21, 27003),

Gene: HerbBucket_33 Start: 27091, Stop: 27330, Start Num: 15

Candidate Starts for HerbBucket_33:

(Start: 15 @27091 has 43 MA's), (22, 27196), (23, 27199), (26, 27241),

Gene: Hoshi_43 Start: 29736, Stop: 29933, Start Num: 15

Candidate Starts for Hoshi_43:

(Start: 14 @29700 has 2 MA's), (Start: 15 @29736 has 43 MA's),

Gene: IceWarrior_42 Start: 29436, Stop: 29633, Start Num: 15

Candidate Starts for IceWarrior_42:

(Start: 14 @29400 has 2 MA's), (Start: 15 @29436 has 43 MA's),

Gene: Indigenous_43 Start: 29736, Stop: 29933, Start Num: 15

Candidate Starts for Indigenous_43:

(Start: 14 @29700 has 2 MA's), (Start: 15 @29736 has 43 MA's),

Gene: Ingrid_38 Start: 29817, Stop: 30047, Start Num: 17

Candidate Starts for Ingrid_38:

(Start: 17 @29817 has 5 MA's), (21, 29898),

Gene: Inked_38 Start: 30483, Stop: 30716, Start Num: 17

Candidate Starts for Inked_38:

(Start: 17 @30483 has 5 MA's), (21, 30564),

Gene: Jaylociraptor_43 Start: 29700, Stop: 29933, Start Num: 14

Candidate Starts for Jaylociraptor_43:

(Start: 14 @29700 has 2 MA's), (Start: 15 @29736 has 43 MA's),

Gene: Jeremy4pt0_34 Start: 27085, Stop: 27324, Start Num: 15

Candidate Starts for Jeremy4pt0_34:

(Start: 15 @27085 has 43 MA's), (22, 27190), (23, 27193), (26, 27235),

Gene: Linda_34 Start: 27085, Stop: 27324, Start Num: 15

Candidate Starts for Linda_34:

(Start: 15 @27085 has 43 MA's), (22, 27190), (23, 27193), (26, 27235),

Gene: Loretta_38 Start: 29817, Stop: 30047, Start Num: 17

Candidate Starts for Loretta_38:

(Start: 17 @29817 has 5 MA's), (21, 29898),

Gene: Madamoto_44 Start: 29907, Stop: 30101, Start Num: 15

Candidate Starts for Madamoto_44:

(Start: 14 @29877 has 2 MA's), (Start: 15 @29907 has 43 MA's), (24, 30009), (30, 30084),

Gene: Maya_43 Start: 29714, Stop: 29947, Start Num: 14

Candidate Starts for Maya_43:

(Start: 14 @29714 has 2 MA's), (Start: 15 @29750 has 43 MA's),

Gene: MediumFry_34 Start: 28911, Stop: 29141, Start Num: 17
Candidate Starts for MediumFry_34:
(Start: 17 @28911 has 5 MA's), (21, 28992),

Gene: Michelle_34 Start: 27090, Stop: 27329, Start Num: 15
Candidate Starts for Michelle_34:
(Start: 15 @27090 has 43 MA's), (22, 27195), (23, 27198), (26, 27240),

Gene: Miek_34 Start: 26735, Stop: 26941, Start Num: 15
Candidate Starts for Miek_34:
(9, 26627), (10, 26633), (Start: 15 @26735 has 43 MA's), (18, 26741), (24, 26843), (26, 26882), (30, 26918),

Gene: MrAaronian_34 Start: 27090, Stop: 27329, Start Num: 15
Candidate Starts for MrAaronian_34:
(Start: 15 @27090 has 43 MA's), (22, 27195), (23, 27198), (26, 27240),

Gene: Namo_44 Start: 30082, Stop: 30279, Start Num: 15
Candidate Starts for Namo_44:
(8, 29914), (Start: 15 @30082 has 43 MA's),

Gene: Natasha_35 Start: 26870, Stop: 27100, Start Num: 15
Candidate Starts for Natasha_35:
(1, 26582), (2, 26606), (3, 26615), (4, 26621), (5, 26636), (6, 26642), (7, 26684), (11, 26807), (Start: 14 @26837 has 2 MA's), (Start: 15 @26870 has 43 MA's), (20, 26948), (22, 26975), (23, 26978), (25, 26987), (28, 27038),

Gene: Navi1117_37 Start: 28947, Stop: 29144, Start Num: 16
Candidate Starts for Navi1117_37:
(Start: 16 @28947 has 1 MA's), (19, 29010), (26, 29091), (27, 29106),

Gene: OlympicHelado_43 Start: 29757, Stop: 29954, Start Num: 15
Candidate Starts for OlympicHelado_43:
(Start: 14 @29721 has 2 MA's), (Start: 15 @29757 has 43 MA's),

Gene: Onestar_34 Start: 26883, Stop: 27122, Start Num: 15
Candidate Starts for Onestar_34:
(Start: 14 @26847 has 2 MA's), (Start: 15 @26883 has 43 MA's), (22, 26988), (27, 27048),

Gene: Popy_43 Start: 30393, Stop: 30590, Start Num: 15
Candidate Starts for Popy_43:
(Start: 15 @30393 has 43 MA's),

Gene: Powelldog_36 Start: 27147, Stop: 27374, Start Num: 15
Candidate Starts for Powelldog_36:
(13, 27093), (Start: 15 @27147 has 43 MA's), (22, 27252), (24, 27258), (25, 27264), (28, 27315),

Gene: ProfFrink_34 Start: 27090, Stop: 27329, Start Num: 15
Candidate Starts for ProfFrink_34:
(Start: 15 @27090 has 43 MA's), (22, 27195), (23, 27198), (26, 27240),

Gene: Rainydai_35 Start: 27119, Stop: 27325, Start Num: 15
Candidate Starts for Rainydai_35:

(9, 27011), (10, 27017), (Start: 15 @27119 has 43 MA's), (18, 27125), (23, 27224), (24, 27227), (26, 27266), (30, 27302),

Gene: Raunak_35 Start: 27085, Stop: 27324, Start Num: 15
Candidate Starts for Raunak_35:
(Start: 15 @27085 has 43 MA's), (22, 27190), (23, 27193), (26, 27235),

Gene: Regigigas_36 Start: 27119, Stop: 27325, Start Num: 15
Candidate Starts for Regigigas_36:
(9, 27011), (10, 27017), (Start: 15 @27119 has 43 MA's), (18, 27125), (24, 27227), (26, 27266), (30, 27302),

Gene: Rima_44 Start: 30082, Stop: 30279, Start Num: 15
Candidate Starts for Rima_44:
(8, 29914), (Start: 15 @30082 has 43 MA's),

Gene: RustyBoy_35 Start: 26851, Stop: 27081, Start Num: 15
Candidate Starts for RustyBoy_35:
(12, 26791), (Start: 14 @26818 has 2 MA's), (Start: 15 @26851 has 43 MA's), (20, 26929), (22, 26956), (23, 26959), (25, 26968), (28, 27019),

Gene: Salk_34 Start: 27085, Stop: 27324, Start Num: 15
Candidate Starts for Salk_34:
(Start: 15 @27085 has 43 MA's), (22, 27190), (23, 27193), (26, 27235),

Gene: Shiba_34 Start: 27085, Stop: 27324, Start Num: 15
Candidate Starts for Shiba_34:
(Start: 15 @27085 has 43 MA's), (22, 27190), (23, 27193), (26, 27235),

Gene: Sloopypjoe_34 Start: 27091, Stop: 27330, Start Num: 15
Candidate Starts for Sloopypjoe_34:
(Start: 15 @27091 has 43 MA's), (22, 27196), (23, 27199), (26, 27241),

Gene: Soshi_42 Start: 30005, Stop: 30202, Start Num: 15
Candidate Starts for Soshi_42:
(Start: 15 @30005 has 43 MA's),

Gene: Spain_34 Start: 27090, Stop: 27329, Start Num: 15
Candidate Starts for Spain_34:
(Start: 15 @27090 has 43 MA's), (22, 27195), (23, 27198), (26, 27240),

Gene: Spectropatronm_43 Start: 29736, Stop: 29933, Start Num: 15
Candidate Starts for Spectropatronm_43:
(Start: 14 @29700 has 2 MA's), (Start: 15 @29736 has 43 MA's),

Gene: Sporto_36 Start: 28583, Stop: 28819, Start Num: 15
Candidate Starts for Sporto_36:
(12, 28520), (Start: 14 @28547 has 2 MA's), (Start: 15 @28583 has 43 MA's), (20, 28661), (22, 28688), (23, 28691), (25, 28700), (28, 28751), (29, 28763),

Gene: StarLord_34 Start: 27091, Stop: 27330, Start Num: 15
Candidate Starts for StarLord_34:
(Start: 15 @27091 has 43 MA's), (22, 27196), (23, 27199), (26, 27241),

Gene: Stayer_34 Start: 27085, Stop: 27324, Start Num: 15
Candidate Starts for Stayer_34:
(Start: 15 @27085 has 43 MA's), (22, 27190), (23, 27193), (26, 27235),

Gene: TaidaOne_43 Start: 30290, Stop: 30487, Start Num: 15
Candidate Starts for TaidaOne_43:
(Start: 14 @30254 has 2 MA's), (Start: 15 @30290 has 43 MA's),

Gene: Thiqqums_35 Start: 27119, Stop: 27325, Start Num: 15
Candidate Starts for Thiqqums_35:
(9, 27011), (10, 27017), (Start: 15 @27119 has 43 MA's), (18, 27125), (23, 27224), (24, 27227), (26, 27266), (30, 27302),

Gene: TieDye_42 Start: 29334, Stop: 29531, Start Num: 15
Candidate Starts for TieDye_42:
(Start: 14 @29298 has 2 MA's), (Start: 15 @29334 has 43 MA's),

Gene: TonyStarch_42 Start: 29439, Stop: 29636, Start Num: 15
Candidate Starts for TonyStarch_42:
(Start: 14 @29403 has 2 MA's), (Start: 15 @29439 has 43 MA's),

Gene: Wigberry_43 Start: 28830, Stop: 29036, Start Num: 15
Candidate Starts for Wigberry_43:
(Start: 14 @28800 has 2 MA's), (Start: 15 @28830 has 43 MA's), (30, 29013),

Gene: Zippen_37 Start: 30360, Stop: 30590, Start Num: 17
Candidate Starts for Zippen_37:
(Start: 17 @30360 has 5 MA's), (21, 30441),