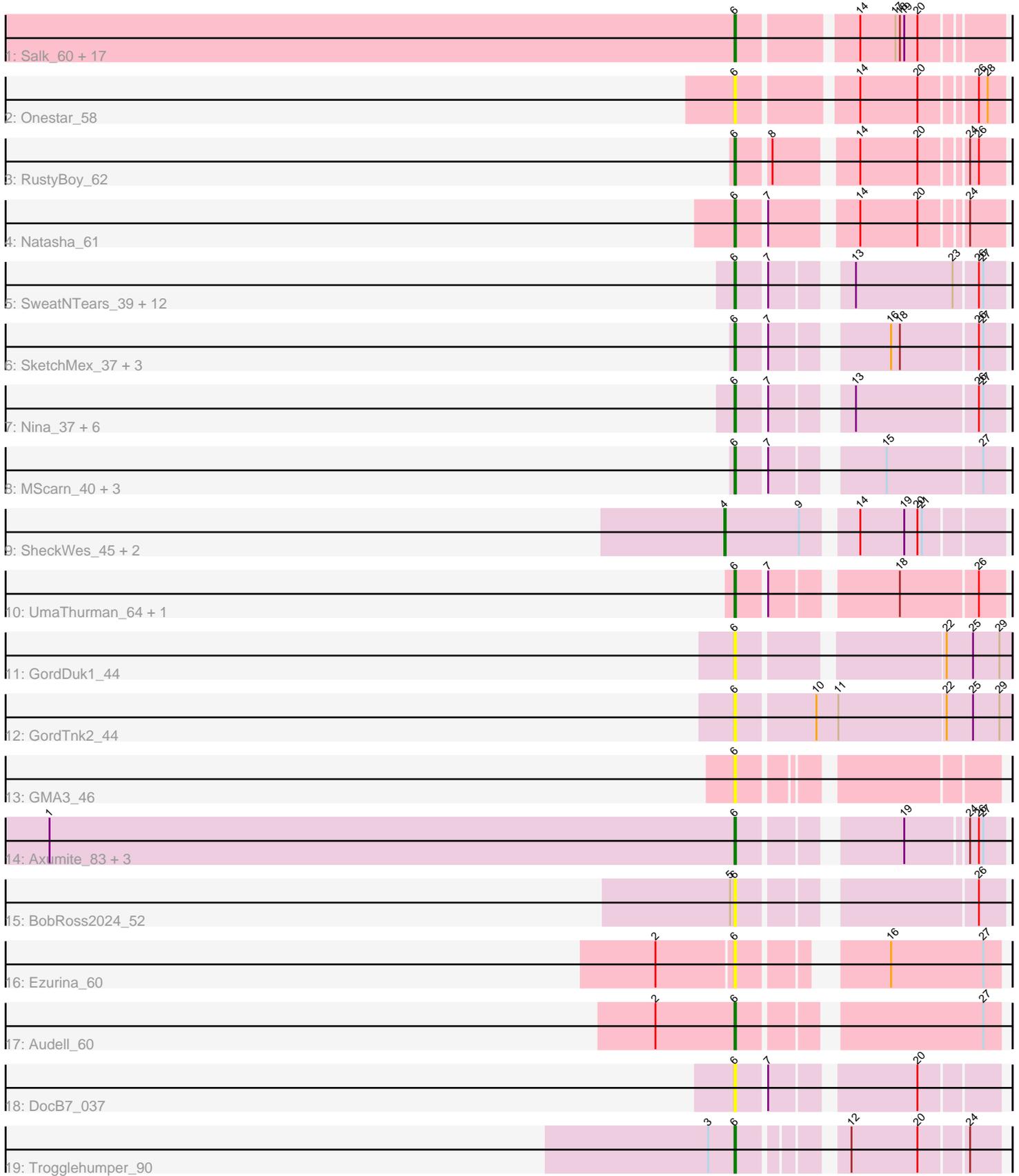# Pham 282206

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 282206 Report

This analysis was run 02/23/26 on database version 636.

Pham number 282206 has 66 members, 23 are drafts.

Phages represented in each track:
• Track 1 : Salk_60, Spain_61, Boog_59, Egad_60, Stayer_60, Sloopyjoe_60, Raunak_62, DoctorPepper_59, StarLord_60, BronxBay_60, Linda_60, Michelle_60, HerbBucket_59, Djungelskog_59, Jeremy4pt0_58, ProfFrink_60, Shiba_59, MrAaronian_60
• Track 2 : Onestar_58
• Track 3 : RustyBoy_62
• Track 4 : Natasha_61
• Track 5 : SweatNTears_39, Agatha_37, Starburst_39, Cozz_36, RedBaron_40, Quasar_38, PsychoKiller_37, Sopespian_37, Eliott_38, Axym_37, RADical_39, GoldHunter_39, Bubble_36
• Track 6 : SketchMex_37, Biskit_39, Blondies_40, Troje_39
• Track 7 : Nina_37, MunkgeeRoachy_36, Typhonomachy_36, RSchmailzl_39, Burnsey_37, Socotra_39, Carsonalex_41
• Track 8 : MScarn_40, Horseradish_39, Buttrmlkdreams_39, Yummy_39
• Track 9 : SheckWes_45, ElJefes_43, McDazzle_44
• Track 10 : UmaThurman_64, PhrostedPhlake_68
• Track 11 : GordDuk1_44
• Track 12 : GordTnk2_44
• Track 13 : GMA3_46
• Track 14 : Axumite_83, Shatter_83, Fresco_83, Ligma_83
• Track 15 : BobRoss2024_52
• Track 16 : Ezurina_60
• Track 17 : Audell_60
• Track 18 : DocB7_037
• Track 19 : Trogglehumper_90

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

The start number called the most often in the published annotations is 6, it was called in 42 of the 43 non-draft genes in the pham.

Genes that call this "Most Annotated" start:
• Agatha_37, Audell_60, Axumite_83, Axym_37, Biskit_39, Blondies_40, BobRoss2024_52, Boog_59, BronxBay_60, Bubble_36, Burnsey_37,

Buttrmlkdreams_39, Carsonalex_41, Cozz_36, Djungelskog_59, DocB7_037, DoctorPepper_59, Egad_60, Eliott_38, Ezurina_60, Fresco_83, GMA3_46, GoldHunter_39, GordDuk1_44, GordTnk2_44, HerbBucket_59, Horseradish_39, Jeremy4pt0_58, Ligma_83, Linda_60, MScarn_40, Michelle_60, MrAaronian_60, MunkgeeRoachy_36, Natasha_61, Nina_37, Onestar_58, PhrostedPhlake_68, ProfFrink_60, PsychoKiller_37, Quasar_38, RADical_39, RSchmailzl_39, Raunak_62, RedBaron_40, RustyBoy_62, Salk_60, Shatter_83, Shiba_59, SketchMex_37, Sloopyjoe_60, Socotra_39, Sopespian_37, Spain_61, StarLord_60, Starburst_39, Stayer_60, SweatNTears_39, Trogglehumper_90, Troje_39, Typhonomachy_36, UmaThurman_64, Yummy_39,

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

Genes that do not have the "Most Annotated" start:
• ElJefes_43, McDazzle_44, SheckWes_45,

Summary by start number:

Start 4:
• Found in 3 of 66 (4.5%) of genes in pham
• Manual Annotations of this start: 1 of 43
• Called 100.0% of time when present
• Phage (with cluster) where this start called: ElJefes_43 (CT), McDazzle_44 (CT), SheckWes_45 (CT),

Start 6:
• Found in 63 of 66 (95.5%) of genes in pham
• Manual Annotations of this start: 42 of 43
• Called 100.0% of time when present
• Phage (with cluster) where this start called: Agatha_37 (CT), Audell_60 (FR), Axumite_83 (DR), Axym_37 (CT), Biskit_39 (CT), Blondies_40 (CT), BobRoss2024_52 (DR), Boog_59 (AW), BronxBay_60 (AW), Bubble_36 (CT), Burnsey_37 (CT), Buttrmlkdreams_39 (CT), Carsonalex_41 (CT), Cozz_36 (CT), Djungelskog_59 (AW), DocB7_037 (singleton), DoctorPepper_59 (AW), Egad_60 (AW), Eliott_38 (CT), Ezurina_60 (FR), Fresco_83 (DR), GMA3_46 (DF2), GoldHunter_39 (CT), GordDuk1_44 (DF1), GordTnk2_44 (DF1), HerbBucket_59 (AW), Horseradish_39 (CT), Jeremy4pt0_58 (AW), Ligma_83 (DR), Linda_60 (AW), MScarn_40 (CT), Michelle_60 (AW), MrAaronian_60 (AW), MunkgeeRoachy_36 (CT), Natasha_61 (AW), Nina_37 (CT), Onestar_58 (AW), PhrostedPhlake_68 (CV), ProfFrink_60 (AW), PsychoKiller_37 (CT), Quasar_38 (CT), RADical_39 (CT), RSchmailzl_39 (CT), Raunak_62 (AW), RedBaron_40 (CT), RustyBoy_62 (AW), Salk_60 (AW), Shatter_83 (DR), Shiba_59 (AW), SketchMex_37 (CT), Sloopyjoe_60 (AW), Socotra_39 (CT), Sopespian_37 (CT), Spain_61 (AW), StarLord_60 (AW), Starburst_39 (CT), Stayer_60 (AW), SweatNTears_39 (CT), Trogglehumper_90 (singleton), Troje_39 (CT), Typhonomachy_36 (CT), UmaThurman_64 (CV), Yummy_39 (CT),

Summary by clusters:

There are 8 clusters represented in this pham: FR, DF1, singleton, DF2, AW, DR, CV, CT,

Info for manual annotations of cluster AW:
•Start number 6 was manually annotated 16 times for cluster AW.

Info for manual annotations of cluster CT:
•Start number 4 was manually annotated 1 time for cluster CT.
•Start number 6 was manually annotated 18 times for cluster CT.

Info for manual annotations of cluster CV:
•Start number 6 was manually annotated 2 times for cluster CV.

Info for manual annotations of cluster DR:
•Start number 6 was manually annotated 4 times for cluster DR.

Info for manual annotations of cluster FR:
•Start number 6 was manually annotated 1 time for cluster FR.

Gene Information:

Gene: Agatha_37 Start: 27161, Stop: 27003, Start Num: 6
Candidate Starts for Agatha_37:
(Start: 6 @27161 has 42 MA's), (7, 27143), (13, 27101), (23, 27035), (26, 27020), (27, 27017),

Gene: Audell_60 Start: 38775, Stop: 38617, Start Num: 6
Candidate Starts for Audell_60:
(2, 38829), (Start: 6 @38775 has 42 MA's), (27, 38628),

Gene: Axumite_83 Start: 60379, Stop: 60224, Start Num: 6
Candidate Starts for Axumite_83:
(1, 60847), (Start: 6 @60379 has 42 MA's), (19, 60286), (24, 60247), (26, 60241), (27, 60238),

Gene: Axym_37 Start: 27139, Stop: 26981, Start Num: 6
Candidate Starts for Axym_37:
(Start: 6 @27139 has 42 MA's), (7, 27121), (13, 27079), (23, 27013), (26, 26998), (27, 26995),

Gene: Biskit_39 Start: 27114, Stop: 26956, Start Num: 6
Candidate Starts for Biskit_39:
(Start: 6 @27114 has 42 MA's), (7, 27096), (16, 27030), (18, 27024), (26, 26973), (27, 26970),

Gene: Blondies_40 Start: 27432, Stop: 27274, Start Num: 6
Candidate Starts for Blondies_40:
(Start: 6 @27432 has 42 MA's), (7, 27414), (16, 27348), (18, 27342), (26, 27291), (27, 27288),

Gene: BobRoss2024_52 Start: 46394, Stop: 46236, Start Num: 6
Candidate Starts for BobRoss2024_52:
(5, 46397), (Start: 6 @46394 has 42 MA's), (26, 46253),

Gene: Boog_59 Start: 40730, Stop: 40891, Start Num: 6
Candidate Starts for Boog_59:
(Start: 6 @40730 has 42 MA's), (14, 40802), (17, 40826), (18, 40829), (19, 40832), (20, 40841),

Gene: BronxBay_60 Start: 40986, Stop: 41147, Start Num: 6
Candidate Starts for BronxBay_60:
(Start: 6 @40986 has 42 MA's), (14, 41058), (17, 41082), (18, 41085), (19, 41088), (20, 41097),

Gene: Bubble_36 Start: 26748, Stop: 26590, Start Num: 6
Candidate Starts for Bubble_36:
(Start: 6 @26748 has 42 MA's), (7, 26730), (13, 26688), (23, 26622), (26, 26607), (27, 26604),

Gene: Burnsey_37 Start: 27152, Stop: 26994, Start Num: 6
Candidate Starts for Burnsey_37:
(Start: 6 @27152 has 42 MA's), (7, 27134), (13, 27092), (26, 27011), (27, 27008),

Gene: Buttrmlkdreams_39 Start: 27438, Stop: 27280, Start Num: 6
Candidate Starts for Buttrmlkdreams_39:
(Start: 6 @27438 has 42 MA's), (7, 27420), (15, 27357), (27, 27294),

Gene: Carsonalex_41 Start: 27189, Stop: 27031, Start Num: 6
Candidate Starts for Carsonalex_41:
(Start: 6 @27189 has 42 MA's), (7, 27171), (13, 27129), (26, 27048), (27, 27045),

Gene: Cozz_36 Start: 26749, Stop: 26591, Start Num: 6
Candidate Starts for Cozz_36:
(Start: 6 @26749 has 42 MA's), (7, 26731), (13, 26689), (23, 26623), (26, 26608), (27, 26605),

Gene: Djungelskog_59 Start: 40985, Stop: 41146, Start Num: 6
Candidate Starts for Djungelskog_59:
(Start: 6 @40985 has 42 MA's), (14, 41057), (17, 41081), (18, 41084), (19, 41087), (20, 41096),

Gene: DocB7_037 Start: 37679, Stop: 37524, Start Num: 6
Candidate Starts for DocB7_037:
(Start: 6 @37679 has 42 MA's), (7, 37661), (20, 37574),

Gene: DoctorPepper_59 Start: 40690, Stop: 40851, Start Num: 6
Candidate Starts for DoctorPepper_59:
(Start: 6 @40690 has 42 MA's), (14, 40762), (17, 40786), (18, 40789), (19, 40792), (20, 40801),

Gene: Egad_60 Start: 40987, Stop: 41148, Start Num: 6
Candidate Starts for Egad_60:
(Start: 6 @40987 has 42 MA's), (14, 41059), (17, 41083), (18, 41086), (19, 41089), (20, 41098),

Gene: ElJefes_43 Start: 30713, Stop: 30540, Start Num: 4
Candidate Starts for ElJefes_43:
(Start: 4 @30713 has 1 MA's), (9, 30662), (14, 30632), (19, 30602), (20, 30593), (21, 30590),

Gene: Eliott_38 Start: 27160, Stop: 27002, Start Num: 6
Candidate Starts for Eliott_38:
(Start: 6 @27160 has 42 MA's), (7, 27142), (13, 27100), (23, 27034), (26, 27019), (27, 27016),

Gene: Ezurina_60 Start: 36586, Stop: 36434, Start Num: 6
Candidate Starts for Ezurina_60:
(2, 36637), (Start: 6 @36586 has 42 MA's), (16, 36508), (27, 36445),

Gene: Fresco_83 Start: 60385, Stop: 60230, Start Num: 6
Candidate Starts for Fresco_83:
(1, 60853), (Start: 6 @60385 has 42 MA's), (19, 60292), (24, 60253), (26, 60247), (27, 60244),

Gene: GMA3_46 Start: 44762, Stop: 44610, Start Num: 6
Candidate Starts for GMA3_46:
(Start: 6 @44762 has 42 MA's),

Gene: GoldHunter_39 Start: 27161, Stop: 27003, Start Num: 6
Candidate Starts for GoldHunter_39:
(Start: 6 @27161 has 42 MA's), (7, 27143), (13, 27101), (23, 27035), (26, 27020), (27, 27017),

Gene: GordDuk1_44 Start: 42833, Stop: 42663, Start Num: 6
Candidate Starts for GordDuk1_44:
(Start: 6 @42833 has 42 MA's), (22, 42707), (25, 42689), (29, 42671),

Gene: GordTnk2_44 Start: 42811, Stop: 42629, Start Num: 6
Candidate Starts for GordTnk2_44:
(Start: 6 @42811 has 42 MA's), (10, 42760), (11, 42745), (22, 42673), (25, 42655), (29, 42637),

Gene: HerbBucket_59 Start: 40727, Stop: 40888, Start Num: 6
Candidate Starts for HerbBucket_59:
(Start: 6 @40727 has 42 MA's), (14, 40799), (17, 40823), (18, 40826), (19, 40829), (20, 40838),

Gene: Horseradish_39 Start: 26966, Stop: 26808, Start Num: 6
Candidate Starts for Horseradish_39:
(Start: 6 @26966 has 42 MA's), (7, 26948), (15, 26885), (27, 26822),

Gene: Jeremy4pt0_58 Start: 40685, Stop: 40846, Start Num: 6
Candidate Starts for Jeremy4pt0_58:
(Start: 6 @40685 has 42 MA's), (14, 40757), (17, 40781), (18, 40784), (19, 40787), (20, 40796),

Gene: Ligma_83 Start: 60379, Stop: 60224, Start Num: 6
Candidate Starts for Ligma_83:
(1, 60847), (Start: 6 @60379 has 42 MA's), (19, 60286), (24, 60247), (26, 60241), (27, 60238),

Gene: Linda_60 Start: 40983, Stop: 41144, Start Num: 6
Candidate Starts for Linda_60:
(Start: 6 @40983 has 42 MA's), (14, 41055), (17, 41079), (18, 41082), (19, 41085), (20, 41094),

Gene: MScarn_40 Start: 27106, Stop: 26948, Start Num: 6
Candidate Starts for MScarn_40:
(Start: 6 @27106 has 42 MA's), (7, 27088), (15, 27025), (27, 26962),

Gene: McDazzle_44 Start: 30707, Stop: 30534, Start Num: 4
Candidate Starts for McDazzle_44:
(Start: 4 @30707 has 1 MA's), (9, 30656), (14, 30626), (19, 30596), (20, 30587), (21, 30584),

Gene: Michelle_60 Start: 40985, Stop: 41146, Start Num: 6
Candidate Starts for Michelle_60:
(Start: 6 @40985 has 42 MA's), (14, 41057), (17, 41081), (18, 41084), (19, 41087), (20, 41096),

Gene: MrAaronian_60 Start: 40985, Stop: 41146, Start Num: 6

Candidate Starts for MrAaronian_60:
(Start: 6 @40985 has 42 MA's), (14, 41057), (17, 41081), (18, 41084), (19, 41087), (20, 41096),

Gene: MunkgeeRoachy_36 Start: 26623, Stop: 26465, Start Num: 6
Candidate Starts for MunkgeeRoachy_36:
(Start: 6 @26623 has 42 MA's), (7, 26605), (13, 26563), (26, 26482), (27, 26479),

Gene: Natasha_61 Start: 40720, Stop: 40878, Start Num: 6
Candidate Starts for Natasha_61:
(Start: 6 @40720 has 42 MA's), (7, 40738), (14, 40789), (20, 40828), (24, 40855),

Gene: Nina_37 Start: 27285, Stop: 27127, Start Num: 6
Candidate Starts for Nina_37:
(Start: 6 @27285 has 42 MA's), (7, 27267), (13, 27225), (26, 27144), (27, 27141),

Gene: Onestar_58 Start: 40746, Stop: 40907, Start Num: 6
Candidate Starts for Onestar_58:
(Start: 6 @40746 has 42 MA's), (14, 40818), (20, 40857), (26, 40890), (28, 40896),

Gene: PhrostedPhlake_68 Start: 41801, Stop: 41962, Start Num: 6
Candidate Starts for PhrostedPhlake_68:
(Start: 6 @41801 has 42 MA's), (7, 41819), (18, 41894), (26, 41945),

Gene: ProfFrink_60 Start: 40986, Stop: 41147, Start Num: 6
Candidate Starts for ProfFrink_60:
(Start: 6 @40986 has 42 MA's), (14, 41058), (17, 41082), (18, 41085), (19, 41088), (20, 41097),

Gene: PsychoKiller_37 Start: 27161, Stop: 27003, Start Num: 6
Candidate Starts for PsychoKiller_37:
(Start: 6 @27161 has 42 MA's), (7, 27143), (13, 27101), (23, 27035), (26, 27020), (27, 27017),

Gene: Quasar_38 Start: 27709, Stop: 27551, Start Num: 6
Candidate Starts for Quasar_38:
(Start: 6 @27709 has 42 MA's), (7, 27691), (13, 27649), (23, 27583), (26, 27568), (27, 27565),

Gene: RADical_39 Start: 27155, Stop: 26997, Start Num: 6
Candidate Starts for RADical_39:
(Start: 6 @27155 has 42 MA's), (7, 27137), (13, 27095), (23, 27029), (26, 27014), (27, 27011),

Gene: RSchmailzl_39 Start: 27198, Stop: 27040, Start Num: 6
Candidate Starts for RSchmailzl_39:
(Start: 6 @27198 has 42 MA's), (7, 27180), (13, 27138), (26, 27057), (27, 27054),

Gene: Raunak_62 Start: 40683, Stop: 40844, Start Num: 6
Candidate Starts for Raunak_62:
(Start: 6 @40683 has 42 MA's), (14, 40755), (17, 40779), (18, 40782), (19, 40785), (20, 40794),

Gene: RedBaron_40 Start: 27398, Stop: 27240, Start Num: 6
Candidate Starts for RedBaron_40:
(Start: 6 @27398 has 42 MA's), (7, 27380), (13, 27338), (23, 27272), (26, 27257), (27, 27254),

Gene: RustyBoy_62 Start: 40919, Stop: 41077, Start Num: 6
Candidate Starts for RustyBoy_62:

(Start: 6 @40919 has 42 MA's), (8, 40940), (14, 40988), (20, 41027), (24, 41054), (26, 41060),

Gene: Salk_60 Start: 40983, Stop: 41144, Start Num: 6
Candidate Starts for Salk_60:
(Start: 6 @40983 has 42 MA's), (14, 41055), (17, 41079), (18, 41082), (19, 41085), (20, 41094),

Gene: Shatter_83 Start: 60379, Stop: 60224, Start Num: 6
Candidate Starts for Shatter_83:
(1, 60847), (Start: 6 @60379 has 42 MA's), (19, 60286), (24, 60247), (26, 60241), (27, 60238),

Gene: SheckWes_45 Start: 30252, Stop: 30079, Start Num: 4
Candidate Starts for SheckWes_45:
(Start: 4 @30252 has 1 MA's), (9, 30201), (14, 30171), (19, 30141), (20, 30132), (21, 30129),

Gene: Shiba_59 Start: 40683, Stop: 40844, Start Num: 6
Candidate Starts for Shiba_59:
(Start: 6 @40683 has 42 MA's), (14, 40755), (17, 40779), (18, 40782), (19, 40785), (20, 40794),

Gene: SketchMex_37 Start: 27114, Stop: 26956, Start Num: 6
Candidate Starts for SketchMex_37:
(Start: 6 @27114 has 42 MA's), (7, 27096), (16, 27030), (18, 27024), (26, 26973), (27, 26970),

Gene: Sloopyjoe_60 Start: 40987, Stop: 41148, Start Num: 6
Candidate Starts for Sloopyjoe_60:
(Start: 6 @40987 has 42 MA's), (14, 41059), (17, 41083), (18, 41086), (19, 41089), (20, 41098),

Gene: Socotra_39 Start: 27160, Stop: 27002, Start Num: 6
Candidate Starts for Socotra_39:
(Start: 6 @27160 has 42 MA's), (7, 27142), (13, 27100), (26, 27019), (27, 27016),

Gene: Sopespian_37 Start: 27162, Stop: 27004, Start Num: 6
Candidate Starts for Sopespian_37:
(Start: 6 @27162 has 42 MA's), (7, 27144), (13, 27102), (23, 27036), (26, 27021), (27, 27018),

Gene: Spain_61 Start: 40985, Stop: 41146, Start Num: 6
Candidate Starts for Spain_61:
(Start: 6 @40985 has 42 MA's), (14, 41057), (17, 41081), (18, 41084), (19, 41087), (20, 41096),

Gene: StarLord_60 Start: 40986, Stop: 41147, Start Num: 6
Candidate Starts for StarLord_60:
(Start: 6 @40986 has 42 MA's), (14, 41058), (17, 41082), (18, 41085), (19, 41088), (20, 41097),

Gene: Starburst_39 Start: 27155, Stop: 26997, Start Num: 6
Candidate Starts for Starburst_39:
(Start: 6 @27155 has 42 MA's), (7, 27137), (13, 27095), (23, 27029), (26, 27014), (27, 27011),

Gene: Stayer_60 Start: 40983, Stop: 41144, Start Num: 6
Candidate Starts for Stayer_60:
(Start: 6 @40983 has 42 MA's), (14, 41055), (17, 41079), (18, 41082), (19, 41085), (20, 41094),

Gene: SweatNTears_39 Start: 27058, Stop: 26900, Start Num: 6
Candidate Starts for SweatNTears_39:
(Start: 6 @27058 has 42 MA's), (7, 27040), (13, 26998), (23, 26932), (26, 26917), (27, 26914),

Gene: Trogglehumper_90 Start: 66999, Stop: 66847, Start Num: 6
Candidate Starts for Trogglehumper_90:
(3, 67017), (Start: 6 @66999 has 42 MA's), (12, 66942), (20, 66897), (24, 66867),

Gene: Troje_39 Start: 27463, Stop: 27305, Start Num: 6
Candidate Starts for Troje_39:
(Start: 6 @27463 has 42 MA's), (7, 27445), (16, 27379), (18, 27373), (26, 27322), (27, 27319),

Gene: Typhonomachy_36 Start: 26780, Stop: 26622, Start Num: 6
Candidate Starts for Typhonomachy_36:
(Start: 6 @26780 has 42 MA's), (7, 26762), (13, 26720), (26, 26639), (27, 26636),

Gene: UmaThurman_64 Start: 41829, Stop: 41990, Start Num: 6
Candidate Starts for UmaThurman_64:
(Start: 6 @41829 has 42 MA's), (7, 41847), (18, 41922), (26, 41973),

Gene: Yummy_39 Start: 27080, Stop: 26922, Start Num: 6
Candidate Starts for Yummy_39:
(Start: 6 @27080 has 42 MA's), (7, 27062), (15, 26999), (27, 26936),