



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 224600 Report

This analysis was run 03/28/25 on database version 593.

Pham number 224600 has 60 members, 4 are drafts.

Phages represented in each track:

- Track 1 : Teutsch_1, Persimmon_1, Watermoore_248, BlueOtter_249, PacManQ_248, Leo04_252, PacManQ_1, Lululemon_248, Larnav_251, Larnav_1, Scheme_2, Cursive_255, Cross_249, Leo04_1, Cursive_1, BlueOtter_1, HangryHippo_249, HangryHippo_1, Pepperwood_2, Lululemon_1, Persimmon_252, Cross_1, Teutsch_248, Scheme_255, Watermoore_1
- Track 2 : Sushi23_1, Tribute_1, Tribute_247, Sushi23_252, Samisti12_252, Samisti12_1
- Track 3 : Liandry_2, PinkiePie_2, Squillium_254, NootNoot_247, Liandry_251, Bartholomune_252, Bartholomune_2, PinkiePie_252, NootNoot_2, Squillium_2
- Track 4 : Jay2Jay_3, Warpy_3, Jay2Jay_258, Warpy_255
- Track 5 : Mildred21_265, Braelyn_247, Braelyn_2, Mildred21_2
- Track 6 : Paradiddles_2, Paradiddles_243
- Track 7 : Pepperwood_251
- Track 8 : WhereRU_1, WhereRU_250, Navo_1, Navo_243
- Track 9 : Peebs_1, Peebs_248
- Track 10 : Shuckle_2, Shuckle_255

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

The start number called the most often in the published annotations is 3, it was called in 49 of the 56 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Bartholomune_2, Bartholomune_252, BlueOtter_1, BlueOtter_249, Braelyn_2, Braelyn_247, Cross_1, Cross_249, Cursive_1, Cursive_255, HangryHippo_1, HangryHippo_249, Larnav_1, Larnav_251, Leo04_1, Leo04_252, Liandry_2, Liandry_251, Lululemon_1, Lululemon_248, Mildred21_2, Mildred21_265, Navo_1, Navo_243, NootNoot_2, NootNoot_247, PacManQ_1, PacManQ_248, Peebs_1, Peebs_248, Pepperwood_2, Persimmon_1, Persimmon_252, PinkiePie_2, PinkiePie_252, Samisti12_1, Samisti12_252, Scheme_2, Scheme_255, Squillium_2, Squillium_254, Sushi23_1, Sushi23_252, Teutsch_1, Teutsch_248, Tribute_1, Tribute_247, Watermoore_1, Watermoore_248, WhereRU_1, WhereRU_250,

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

- Paradiddles_2, Paradiddles_243, Pepperwood_251,

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

- Jay2Jay_258, Jay2Jay_3, Shuckle_2, Shuckle_255, Warpy_255, Warpy_3,

Summary by start number:

Start 2:

- Found in 6 of 60 (10.0%) of genes in pham
- Manual Annotations of this start: 4 of 56
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Jay2Jay_258 (BE1), Jay2Jay_3 (BE1), Shuckle_2 (BE1), Shuckle_255 (BE1), Warpy_255 (BE1), Warpy_3 (BE1),

Start 3:

- Found in 54 of 60 (90.0%) of genes in pham
- Manual Annotations of this start: 49 of 56
- Called 94.4% of time when present
- Phage (with cluster) where this start called: Bartholomune_2 (BE1), Bartholomune_252 (BE1), BlueOtter_1 (BE1), BlueOtter_249 (BE1), Braelyn_2 (BE1), Braelyn_247 (BE1), Cross_1 (BE1), Cross_249 (BE1), Cursive_1 (BE1), Cursive_255 (BE1), HangryHippo_1 (BE1), HangryHippo_249 (BE1), Larnav_1 (BE1), Larnav_251 (BE1), Leo04_1 (BE1), Leo04_252 (BE1), Liandry_2 (BE1), Liandry_251 (BE1), Lululemon_1 (BE1), Lululemon_248 (BE1), Mildred21_2 (BE1), Mildred21_265 (BE1), Navo_1 (BE1), Navo_243 (BE1), NootNoot_2 (BE1), NootNoot_247 (BE1), PacManQ_1 (BE1), PacManQ_248 (BE1), Peebs_1 (BE1), Peebs_248 (BE1), Pepperwood_2 (BE1), Persimmon_1 (BE1), Persimmon_252 (BE1), PinkiePie_2 (BE1), PinkiePie_252 (BE1), Samisti12_1 (BE1), Samisti12_252 (BE1), Scheme_2 (BE1), Scheme_255 (BE1), Squillium_2 (BE1), Squillium_254 (BE1), Sushi23_1 (BE1), Sushi23_252 (BE1), Teutsch_1 (BE1), Teutsch_248 (BE1), Tribute_1 (BE1), Tribute_247 (BE1), Watermoore_1 (BE1), Watermoore_248 (BE1), WhereRU_1 (BE1), WhereRU_250 (BE1),

Start 4:

- Found in 54 of 60 (90.0%) of genes in pham
- Manual Annotations of this start: 3 of 56
- Called 5.6% of time when present
- Phage (with cluster) where this start called: Paradiddles_2 (BE1), Paradiddles_243 (BE1), Pepperwood_251 (BE1),

Summary by clusters:

There is one cluster represented in this pham: BE1

Info for manual annotations of cluster BE1:

- Start number 2 was manually annotated 4 times for cluster BE1.
- Start number 3 was manually annotated 49 times for cluster BE1.
- Start number 4 was manually annotated 3 times for cluster BE1.

Gene Information:

Gene: Bartholomune_252 Start: 122372, Stop: 122196, Start Num: 3
Candidate Starts for Bartholomune_252:
(Start: 3 @122372 has 49 MA's), (Start: 4 @122366 has 3 MA's), (5, 122360), (11, 122201),

Gene: Bartholomune_2 Start: 1273, Stop: 1097, Start Num: 3
Candidate Starts for Bartholomune_2:
(Start: 3 @1273 has 49 MA's), (Start: 4 @1267 has 3 MA's), (5, 1261), (11, 1102),

Gene: BlueOtter_249 Start: 122167, Stop: 121991, Start Num: 3
Candidate Starts for BlueOtter_249:
(Start: 3 @122167 has 49 MA's), (Start: 4 @122161 has 3 MA's), (5, 122155), (6, 122083), (11, 121996),

Gene: BlueOtter_1 Start: 1080, Stop: 904, Start Num: 3
Candidate Starts for BlueOtter_1:
(Start: 3 @1080 has 49 MA's), (Start: 4 @1074 has 3 MA's), (5, 1068), (6, 996), (11, 909),

Gene: Braelyn_247 Start: 121694, Stop: 121518, Start Num: 3
Candidate Starts for Braelyn_247:
(Start: 3 @121694 has 49 MA's), (Start: 4 @121688 has 3 MA's), (5, 121682), (11, 121523),

Gene: Braelyn_2 Start: 1284, Stop: 1108, Start Num: 3
Candidate Starts for Braelyn_2:
(Start: 3 @1284 has 49 MA's), (Start: 4 @1278 has 3 MA's), (5, 1272), (11, 1113),

Gene: Cross_249 Start: 122812, Stop: 122636, Start Num: 3
Candidate Starts for Cross_249:
(Start: 3 @122812 has 49 MA's), (Start: 4 @122806 has 3 MA's), (5, 122800), (6, 122728), (11, 122641),

Gene: Cross_1 Start: 1080, Stop: 904, Start Num: 3
Candidate Starts for Cross_1:
(Start: 3 @1080 has 49 MA's), (Start: 4 @1074 has 3 MA's), (5, 1068), (6, 996), (11, 909),

Gene: Cursive_255 Start: 123089, Stop: 122913, Start Num: 3
Candidate Starts for Cursive_255:
(Start: 3 @123089 has 49 MA's), (Start: 4 @123083 has 3 MA's), (5, 123077), (6, 123005), (11, 122918),

Gene: Cursive_1 Start: 1080, Stop: 904, Start Num: 3
Candidate Starts for Cursive_1:
(Start: 3 @1080 has 49 MA's), (Start: 4 @1074 has 3 MA's), (5, 1068), (6, 996), (11, 909),

Gene: HangryHippo_249 Start: 122167, Stop: 121991, Start Num: 3
Candidate Starts for HangryHippo_249:
(Start: 3 @122167 has 49 MA's), (Start: 4 @122161 has 3 MA's), (5, 122155), (6, 122083), (11, 121996),

Gene: HangryHippo_1 Start: 1080, Stop: 904, Start Num: 3
Candidate Starts for HangryHippo_1:
(Start: 3 @1080 has 49 MA's), (Start: 4 @1074 has 3 MA's), (5, 1068), (6, 996), (11, 909),

Gene: Jay2Jay_3 Start: 1079, Stop: 897, Start Num: 2

Candidate Starts for Jay2Jay_3:
(Start: 2 @1079 has 4 MA's), (10, 923),

Gene: Jay2Jay_258 Start: 123172, Stop: 122990, Start Num: 2
Candidate Starts for Jay2Jay_258:
(Start: 2 @123172 has 4 MA's), (10, 123016),

Gene: Larnav_251 Start: 123084, Stop: 122908, Start Num: 3
Candidate Starts for Larnav_251:
(Start: 3 @123084 has 49 MA's), (Start: 4 @123078 has 3 MA's), (5, 123072), (6, 123000), (11, 122913),

Gene: Larnav_1 Start: 1079, Stop: 903, Start Num: 3
Candidate Starts for Larnav_1:
(Start: 3 @1079 has 49 MA's), (Start: 4 @1073 has 3 MA's), (5, 1067), (6, 995), (11, 908),

Gene: Leo04_252 Start: 123197, Stop: 123021, Start Num: 3
Candidate Starts for Leo04_252:
(Start: 3 @123197 has 49 MA's), (Start: 4 @123191 has 3 MA's), (5, 123185), (6, 123113), (11, 123026),

Gene: Leo04_1 Start: 1079, Stop: 903, Start Num: 3
Candidate Starts for Leo04_1:
(Start: 3 @1079 has 49 MA's), (Start: 4 @1073 has 3 MA's), (5, 1067), (6, 995), (11, 908),

Gene: Liandry_2 Start: 1273, Stop: 1097, Start Num: 3
Candidate Starts for Liandry_2:
(Start: 3 @1273 has 49 MA's), (Start: 4 @1267 has 3 MA's), (5, 1261), (11, 1102),

Gene: Liandry_251 Start: 122794, Stop: 122618, Start Num: 3
Candidate Starts for Liandry_251:
(Start: 3 @122794 has 49 MA's), (Start: 4 @122788 has 3 MA's), (5, 122782), (11, 122623),

Gene: Lululemon_248 Start: 121972, Stop: 121796, Start Num: 3
Candidate Starts for Lululemon_248:
(Start: 3 @121972 has 49 MA's), (Start: 4 @121966 has 3 MA's), (5, 121960), (6, 121888), (11, 121801),

Gene: Lululemon_1 Start: 1080, Stop: 904, Start Num: 3
Candidate Starts for Lululemon_1:
(Start: 3 @1080 has 49 MA's), (Start: 4 @1074 has 3 MA's), (5, 1068), (6, 996), (11, 909),

Gene: Mildred21_265 Start: 122471, Stop: 122295, Start Num: 3
Candidate Starts for Mildred21_265:
(Start: 3 @122471 has 49 MA's), (Start: 4 @122465 has 3 MA's), (5, 122459), (11, 122300),

Gene: Mildred21_2 Start: 1313, Stop: 1137, Start Num: 3
Candidate Starts for Mildred21_2:
(Start: 3 @1313 has 49 MA's), (Start: 4 @1307 has 3 MA's), (5, 1301), (11, 1142),

Gene: Navo_1 Start: 1070, Stop: 894, Start Num: 3
Candidate Starts for Navo_1:
(Start: 3 @1070 has 49 MA's), (Start: 4 @1064 has 3 MA's), (5, 1058), (8, 947), (11, 899),

Gene: Navo_243 Start: 120695, Stop: 120519, Start Num: 3
Candidate Starts for Navo_243:
(Start: 3 @120695 has 49 MA's), (Start: 4 @120689 has 3 MA's), (5, 120683), (8, 120572), (11, 120524),

Gene: NootNoot_247 Start: 121582, Stop: 121406, Start Num: 3
Candidate Starts for NootNoot_247:
(Start: 3 @121582 has 49 MA's), (Start: 4 @121576 has 3 MA's), (5, 121570), (11, 121411),

Gene: NootNoot_2 Start: 1283, Stop: 1107, Start Num: 3
Candidate Starts for NootNoot_2:
(Start: 3 @1283 has 49 MA's), (Start: 4 @1277 has 3 MA's), (5, 1271), (11, 1112),

Gene: PacManQ_248 Start: 121972, Stop: 121796, Start Num: 3
Candidate Starts for PacManQ_248:
(Start: 3 @121972 has 49 MA's), (Start: 4 @121966 has 3 MA's), (5, 121960), (6, 121888), (11, 121801),

Gene: PacManQ_1 Start: 1080, Stop: 904, Start Num: 3
Candidate Starts for PacManQ_1:
(Start: 3 @1080 has 49 MA's), (Start: 4 @1074 has 3 MA's), (5, 1068), (6, 996), (11, 909),

Gene: Paradiddles_2 Start: 1267, Stop: 1097, Start Num: 4
Candidate Starts for Paradiddles_2:
(Start: 3 @1273 has 49 MA's), (Start: 4 @1267 has 3 MA's), (5, 1261), (11, 1102),

Gene: Paradiddles_243 Start: 123975, Stop: 123805, Start Num: 4
Candidate Starts for Paradiddles_243:
(Start: 3 @123981 has 49 MA's), (Start: 4 @123975 has 3 MA's), (5, 123969), (11, 123810),

Gene: Peebs_1 Start: 1080, Stop: 904, Start Num: 3
Candidate Starts for Peebs_1:
(1, 1095), (Start: 3 @1080 has 49 MA's), (Start: 4 @1074 has 3 MA's), (5, 1068), (9, 933), (11, 909),

Gene: Peebs_248 Start: 123055, Stop: 122879, Start Num: 3
Candidate Starts for Peebs_248:
(1, 123070), (Start: 3 @123055 has 49 MA's), (Start: 4 @123049 has 3 MA's), (5, 123043), (9, 122908), (11, 122884),

Gene: Pepperwood_251 Start: 123013, Stop: 122843, Start Num: 4
Candidate Starts for Pepperwood_251:
(Start: 3 @123019 has 49 MA's), (Start: 4 @123013 has 3 MA's), (5, 123007), (6, 122935), (11, 122848),

Gene: Pepperwood_2 Start: 1234, Stop: 1058, Start Num: 3
Candidate Starts for Pepperwood_2:
(Start: 3 @1234 has 49 MA's), (Start: 4 @1228 has 3 MA's), (5, 1222), (6, 1150), (11, 1063),

Gene: Persimmon_1 Start: 1070, Stop: 894, Start Num: 3
Candidate Starts for Persimmon_1:
(Start: 3 @1070 has 49 MA's), (Start: 4 @1064 has 3 MA's), (5, 1058), (6, 986), (11, 899),

Gene: Persimmon_252 Start: 121881, Stop: 121705, Start Num: 3
Candidate Starts for Persimmon_252:
(Start: 3 @121881 has 49 MA's), (Start: 4 @121875 has 3 MA's), (5, 121869), (6, 121797), (11, 121710),

Gene: PinkiePie_2 Start: 1273, Stop: 1097, Start Num: 3
Candidate Starts for PinkiePie_2:
(Start: 3 @1273 has 49 MA's), (Start: 4 @1267 has 3 MA's), (5, 1261), (11, 1102),

Gene: PinkiePie_252 Start: 122794, Stop: 122618, Start Num: 3
Candidate Starts for PinkiePie_252:
(Start: 3 @122794 has 49 MA's), (Start: 4 @122788 has 3 MA's), (5, 122782), (11, 122623),

Gene: Samisti12_252 Start: 124123, Stop: 123947, Start Num: 3
Candidate Starts for Samisti12_252:
(Start: 3 @124123 has 49 MA's), (Start: 4 @124117 has 3 MA's), (5, 124111), (9, 123976), (11, 123952),

Gene: Samisti12_1 Start: 1079, Stop: 903, Start Num: 3
Candidate Starts for Samisti12_1:
(Start: 3 @1079 has 49 MA's), (Start: 4 @1073 has 3 MA's), (5, 1067), (9, 932), (11, 908),

Gene: Scheme_2 Start: 1234, Stop: 1058, Start Num: 3
Candidate Starts for Scheme_2:
(Start: 3 @1234 has 49 MA's), (Start: 4 @1228 has 3 MA's), (5, 1222), (6, 1150), (11, 1063),

Gene: Scheme_255 Start: 124429, Stop: 124253, Start Num: 3
Candidate Starts for Scheme_255:
(Start: 3 @124429 has 49 MA's), (Start: 4 @124423 has 3 MA's), (5, 124417), (6, 124345), (11, 124258),

Gene: Shuckle_2 Start: 1119, Stop: 937, Start Num: 2
Candidate Starts for Shuckle_2:
(Start: 2 @1119 has 4 MA's), (7, 1020), (10, 963),

Gene: Shuckle_255 Start: 123752, Stop: 123570, Start Num: 2
Candidate Starts for Shuckle_255:
(Start: 2 @123752 has 4 MA's), (7, 123653), (10, 123596),

Gene: Squillium_254 Start: 122797, Stop: 122621, Start Num: 3
Candidate Starts for Squillium_254:
(Start: 3 @122797 has 49 MA's), (Start: 4 @122791 has 3 MA's), (5, 122785), (11, 122626),

Gene: Squillium_2 Start: 1273, Stop: 1097, Start Num: 3
Candidate Starts for Squillium_2:
(Start: 3 @1273 has 49 MA's), (Start: 4 @1267 has 3 MA's), (5, 1261), (11, 1102),

Gene: Sushi23_1 Start: 1080, Stop: 904, Start Num: 3
Candidate Starts for Sushi23_1:
(Start: 3 @1080 has 49 MA's), (Start: 4 @1074 has 3 MA's), (5, 1068), (9, 933), (11, 909),

Gene: Sushi23_252 Start: 123923, Stop: 123747, Start Num: 3
Candidate Starts for Sushi23_252:

(Start: 3 @123923 has 49 MA's), (Start: 4 @123917 has 3 MA's), (5, 123911), (9, 123776), (11, 123752),

Gene: Teutsch_1 Start: 1080, Stop: 904, Start Num: 3

Candidate Starts for Teutsch_1:

(Start: 3 @1080 has 49 MA's), (Start: 4 @1074 has 3 MA's), (5, 1068), (6, 996), (11, 909),

Gene: Teutsch_248 Start: 123289, Stop: 123113, Start Num: 3

Candidate Starts for Teutsch_248:

(Start: 3 @123289 has 49 MA's), (Start: 4 @123283 has 3 MA's), (5, 123277), (6, 123205), (11, 123118),

Gene: Tribute_1 Start: 1081, Stop: 905, Start Num: 3

Candidate Starts for Tribute_1:

(Start: 3 @1081 has 49 MA's), (Start: 4 @1075 has 3 MA's), (5, 1069), (9, 934), (11, 910),

Gene: Tribute_247 Start: 123625, Stop: 123449, Start Num: 3

Candidate Starts for Tribute_247:

(Start: 3 @123625 has 49 MA's), (Start: 4 @123619 has 3 MA's), (5, 123613), (9, 123478), (11, 123454),

Gene: Warpy_3 Start: 1100, Stop: 918, Start Num: 2

Candidate Starts for Warpy_3:

(Start: 2 @1100 has 4 MA's), (10, 944),

Gene: Warpy_255 Start: 122638, Stop: 122456, Start Num: 2

Candidate Starts for Warpy_255:

(Start: 2 @122638 has 4 MA's), (10, 122482),

Gene: Watermoore_248 Start: 123677, Stop: 123501, Start Num: 3

Candidate Starts for Watermoore_248:

(Start: 3 @123677 has 49 MA's), (Start: 4 @123671 has 3 MA's), (5, 123665), (6, 123593), (11, 123506),

Gene: Watermoore_1 Start: 1081, Stop: 905, Start Num: 3

Candidate Starts for Watermoore_1:

(Start: 3 @1081 has 49 MA's), (Start: 4 @1075 has 3 MA's), (5, 1069), (6, 997), (11, 910),

Gene: WhereRU_1 Start: 1071, Stop: 895, Start Num: 3

Candidate Starts for WhereRU_1:

(Start: 3 @1071 has 49 MA's), (Start: 4 @1065 has 3 MA's), (5, 1059), (8, 948), (11, 900),

Gene: WhereRU_250 Start: 122216, Stop: 122040, Start Num: 3

Candidate Starts for WhereRU_250:

(Start: 3 @122216 has 49 MA's), (Start: 4 @122210 has 3 MA's), (5, 122204), (8, 122093), (11, 122045),