

# Output of ASTAFUNK

I got results of ASTAFUNK as following:

| chr | gene_cluster | variant | acc | bitscore | start_seq | end_seq | start_genomic | end_genomic | first_source | last_sink | start_model | end_model |
|-----|--------------|---------|-----|----------|-----------|---------|---------------|-------------|--------------|-----------|-------------|-----------|
|-----|--------------|---------|-----|----------|-----------|---------|---------------|-------------|--------------|-----------|-------------|-----------|

Analysing genes...

```
chr1  ENSG00000224051  1  ENST00000343938  PF08718.
11 155.72849864147113 27 177 1262372 1263030 1262621 1263140 1 149 149 1],2] 1262851],1263140] [ENST00000488011]
[ENST00000343938]

chr1  ENSG00000224051  1  ENST00000488011  PF08718.11-
NO_CDS 0.0 0 0 1262621 1263140 1262621 1263140 0 0 0 null null null

chr1  ENSG00000169885  1  ENST00000307786;ENST00000378604  PF13499.6-NO_HIT 0.0 1;1 120;
103 1846720 1848295 1846746 1847880 0 0 0 null;null null;null null;null

chr1  ENSG00000169885  2  ENST00000307786;ENST00000378604  PF13833.6-NO_HIT 0.0 1;1 102;
85 1846720 1848241 1846746 1847880 0 0 0 null;null null;null null;null

chr1  ENSG00000169885  3  ENST00000307786;ENST00000378604  PF13405.6-NO_HIT 0.0 1;1 64;
47 1846720 1847991 1846746 1847880 0 0 0 null;null null;null null;null

chr1  ENSG00000169885  4  ENST00000307786;ENST00000378604  PF00036.32-NO_HIT 0.0 1;1 58;
41 1846720 1847973 1846746 1847880 0 0 0 null;null null;null null;null

chr1  ENSG00000187634  1  ENST00000341065;ENST00000455979  PF00536.30-NO_CDS 0.0 0;0 0;
0 861322 879530 861322 879530 0 0 0 null;null null;null null;null

chr1  ENSG00000187634  1  ENST00000420190  PF00536.30-
NO_HIT 0.0 1 180 861322 874672 861322 879530 0 0 0 null null null

chr1  ENSG00000187634  1  ENST00000437963  PF00536.30-
NO_HIT 0.0 1 110 861322 871174 861322 879530 0 0 0 null null null

chr1  ENSG00000187634  1  ENST00000342066  PF00536.
30 56.30120362198872 541 605 878692 879303 861322 879530 1 64 64 1[2^3-5^6-7^8-9],1[2^3-5^6-7^8-10^11-12^13-14],1[2^3-5^6-
7^8-10^11-12^13-16^17-18^19-20^21-22^23-24^25-26^27-28^29-30],4[5^6-7^8-10^11-12^13-15^17-18^19-20^21-22^23-24^25-26^27-28^29-30],13-
16^17-18^19-20^21-22^23-24^25-26^27-30][1],2^3-4^5-6],2^3-4^5-7^9-10^11-12^13-14^15-16^17-18^19-20^21-22],2^3-4^5-8^9-10^11-12^13-14^15-
16^17-18^19-20^21-22][1],2^4-5^6-7^8-9^10-11^12-13^14-15^16-17],3^4-5^6-7^8-9^10-11^12-13^14-15^16-17],3^4-5^6-7^8-9^10-11^12-13^14-17][0,
1^2- 861322[861393^865535-865716^866419-866469^871152-871173],861322[861393^865535-865716^866419-866469^871152-871276^874420-
874509^874655-874671],861322[861393^865535-865716^866419-866469^871152-871276^874420-874509^874655-874840^876524-876686^877516-
877631^877790-877868^877939-878438^878633-878757^879078-879188^879288-879530],865692[865716^866419-866469^871152-871276^874420-
874509^874655-874792^876524-876686^877516-877631^877790-877868^877939-878438^878633-878757^879078-879188^879288-879530],874655-
874840^876524-876686^877516-877631^877790-877868^877939-878438^878633-878757^879078-879530][871173],871276^874420-874509^874655-
874671],871276^874420-874509^874655-874792^876524-876686^877516-877631^877790-877868^877939-878438^878633-878757^879078-
879188^879288-879530],871276^874420-874509^874655-874840^876524-876686^877516-877631^877790-877868^877939-878438^878633-
878757^879078-879188^879288-879530][874671],874792^876524-876686^877516-877631^877790-877868^877939-878438^878633-878757^879078-
879188^879288-879530],874840^876524-876686^877516-877631^877790-877868^877939-878438^878633-878757^879078-879188^879288-879530],
874840^876524-876686^877516-877631^877790-877868^877939-878438^878633-878757^879078-879530][,879188^879288- [ENST00000437963]
[ENST00000420190][ENST00000342066][ENST00000341065][ENST00000455979][ENST00000437963][ENST00000420190][ENST00000341065]
[ENST00000342066][ENST00000420190][ENST00000341065][ENST00000342066][ENST00000455979][ENST00000455979][ENST00000341065,
ENST00000342066]
```

I do not quite understand '-NO\_CDS' and '-NO\_HIT', such as 'PF08718.11-NO\_CDS' and 'PF00036.32-NO\_HIT'. Could you explain it in detail?