






Repeat number	Repeat Start MC58	Repeat stop MC58	Denoeud results	VNTRfinder results	Differences reported		Comments/ reasons for conflict
			Hit start-stop MCZ2491	Hit start-stop MCZ2491	Denoeud reported difference	VNTRfinder reported difference	
1	23260	23284	256713-256734	253305-253409	3	0	
2	24341	24365	257316-257493	257316-257340	153	0	
3	281145	281183	2163317-2163596	2163558-2163596	241	0	
4	370747	370757	2074671-2074675	2074671-2074681	6	0	
5	370778	370800	2074628-2074644	2074628-2074650	6	0	(c.f. repeats 7,10)
6	598226	598240	745362-745376	745363-745376	0	1	
7	613994	614016	2074628-2074644	2074628-2074650	6	0	(c.f. repeats 5,10)
8	794146	794168	941942-941963	941942-941964	1	0	
9	1340997	1341015	1432907-1432940	1432907-1432925	15	0	
10	1443509	1443531	2074628-207644	2074628-2074650	6	0	(c.f. repeats 5,7)
11	1452043	1452078	1535314-1535353	1535314-1535349	4	0	
12	1487085	1487267	1573652-1573834	1573215-1573400	0	3	
13	1527328	1527375	1612372-1612414	1612372-1612419	5	0	
14	1604964	1605008	1741676-1741702	1741676-1741720	18	0	(c.f. repeat 15)
15	1694228	1694275	1741676-1741705	1741676-1741723	18	0	(c.f. repeat 14)
16	1822610	1822663	1934569-1934756	1934569-1934622	134	0	
17	1975357	1975387	558555-558771	558555-558585	186	0	
18	1985578	1985598	547879-547871	547859-547879	12	0	

 Reported indel does not appear to lie in tandem repeat array
  Very poorly aligned region
  Problematic region – arises more than once as a hit

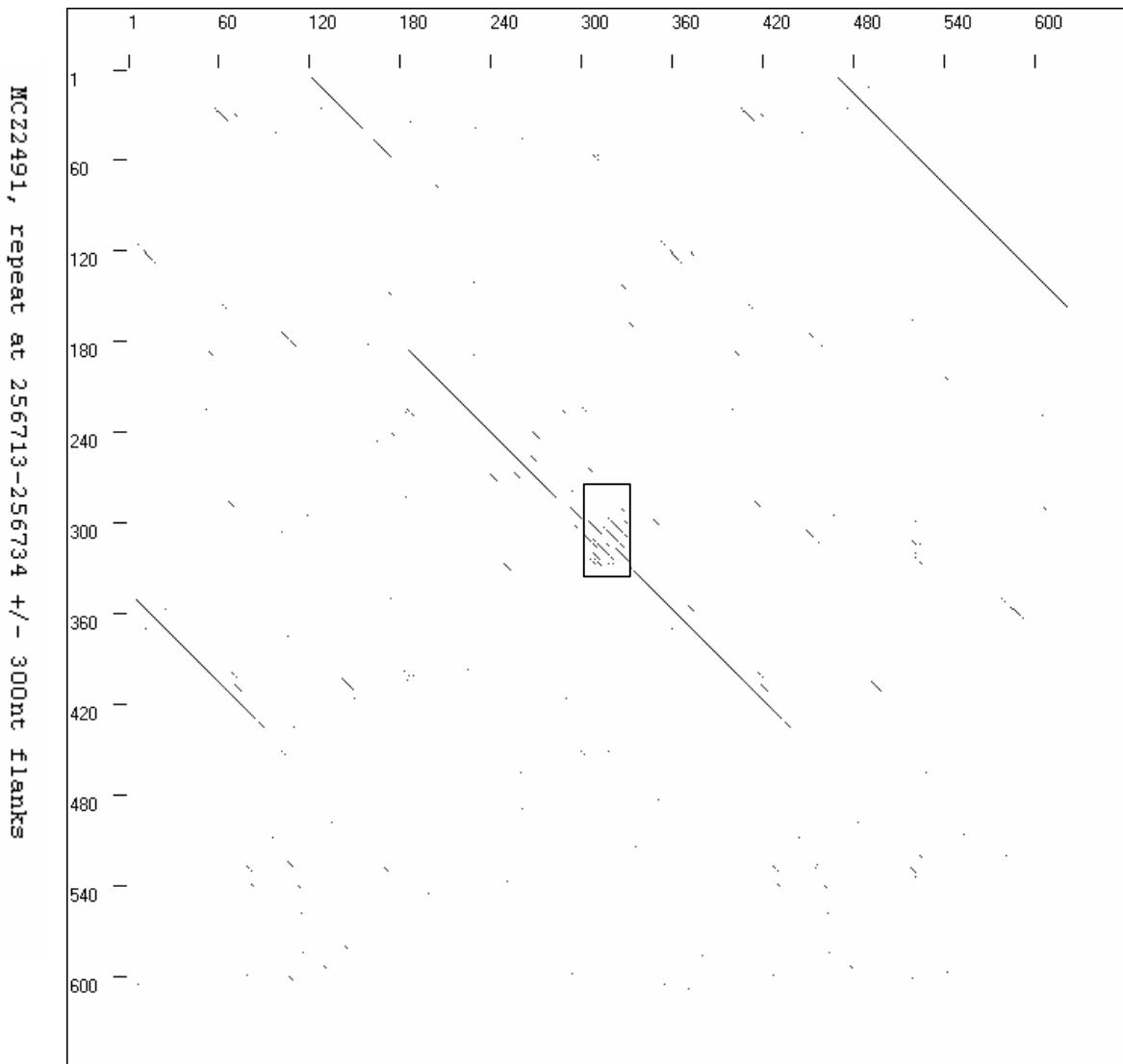
 Indel at start of flanking region/end of repeat array
  Both methods hit different and/or difficult to align regions

1. For each repeat, the first plot represents a plot of the repeat and 300nt left and right flanks for the repeat from MC58 (x-axis) versus the hit plus 300nt flanks from Z2491 (y-axis)
2. Repeat regions are highlighted by a box

Repeat start-stop: 23260-23284
Unit: GTC
Tandem array: GTTGTCGGCGGCGACGGTGTCGTCG
Denoeud report variant of 3
VNTRfinder report variant of 0

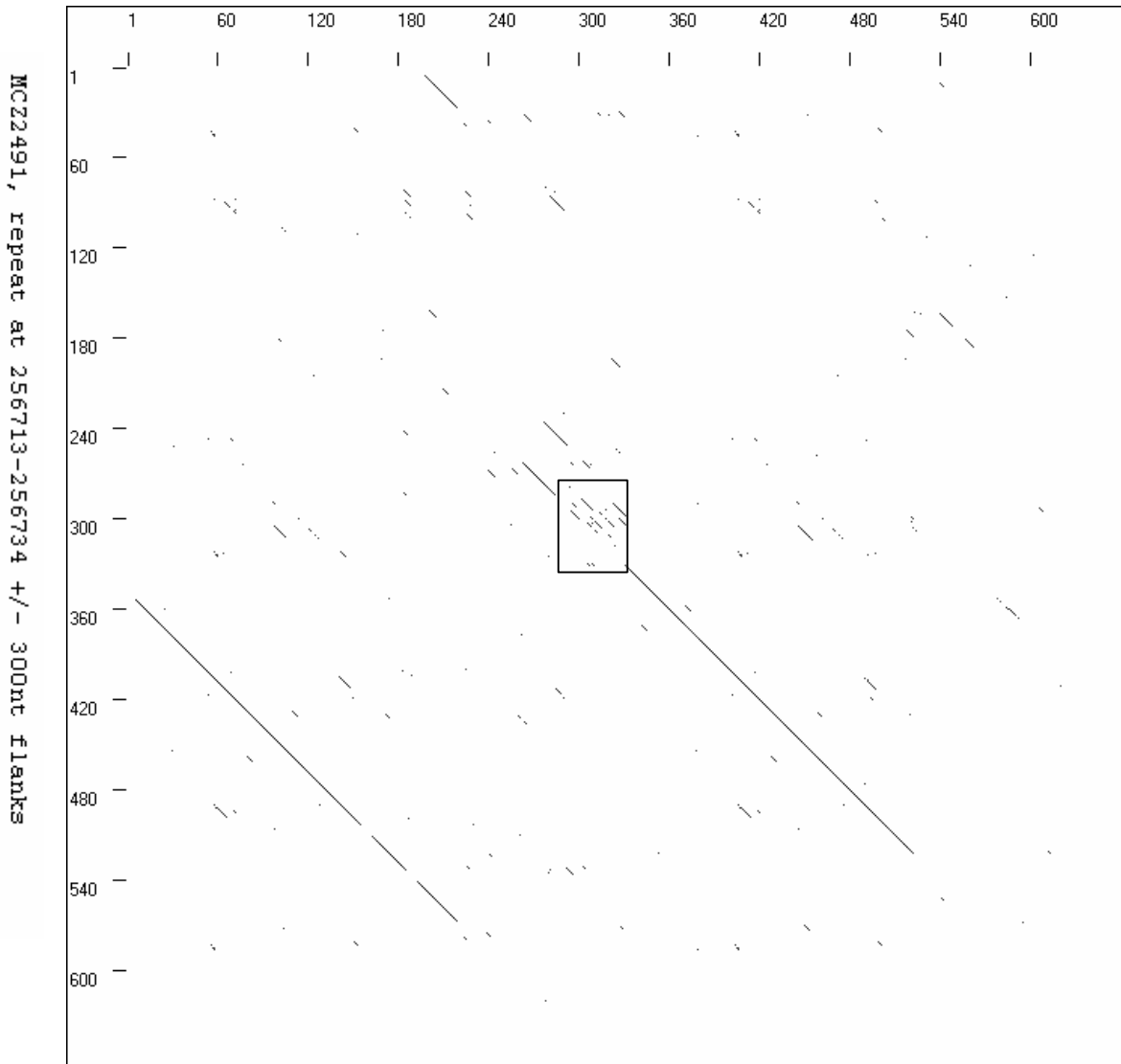
Denoeud: 23260-23284 (MC58) versus 256713-256734 (Z2491)

MC58, repeat at 23260-23284 +/- 300nt flanks



VNTRfinder: 23260-23284 253305-253409

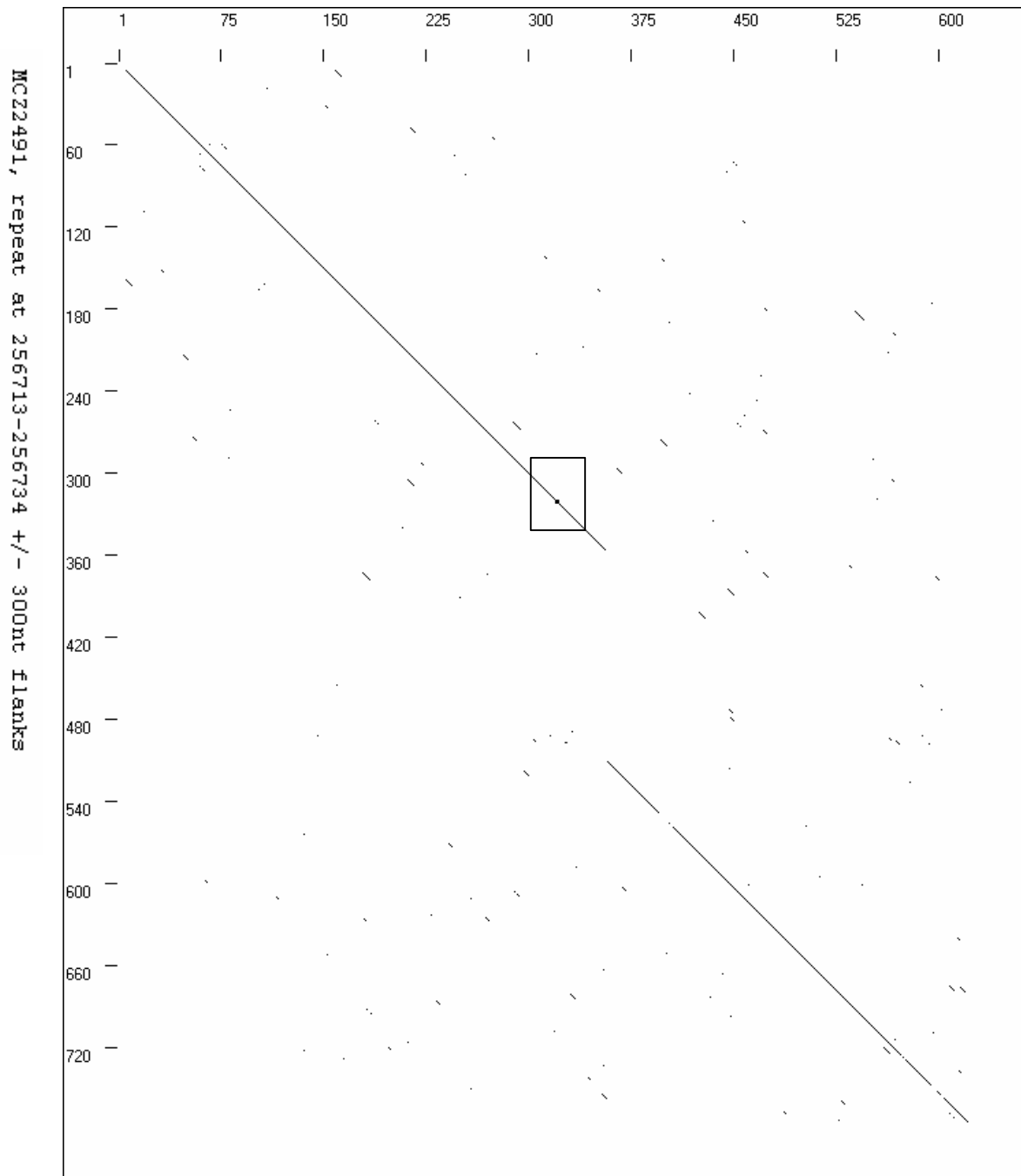
MC58, repeat at 23260-23284 +/- 300nt flanks



Repeat start-stop: 24341-24365
Unit: TGTT
Tandem array: TGTTTGTTTGACTGTTTTATTTTT
Denoeud report variant of 153
VNTRfinder report variant of 0

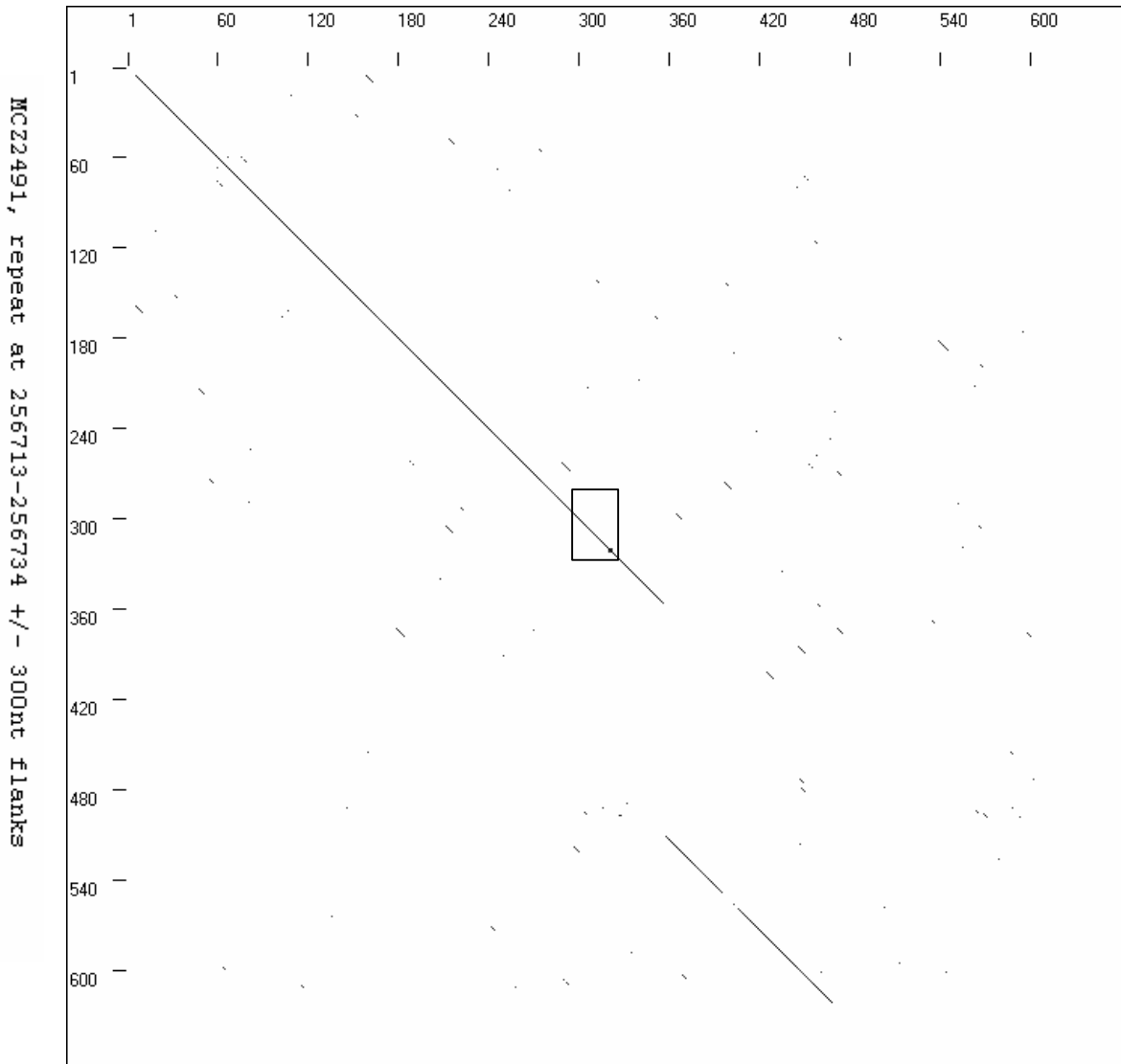
Denoeud: 24341-24365 versus 257316-257493

MC58, repeat at 23260-23284 +/- 300nt flanks



VNTRfinder: 24341-24365 257316-257340

MC58, repeat at 23260-23284 +/- 300nt flanks

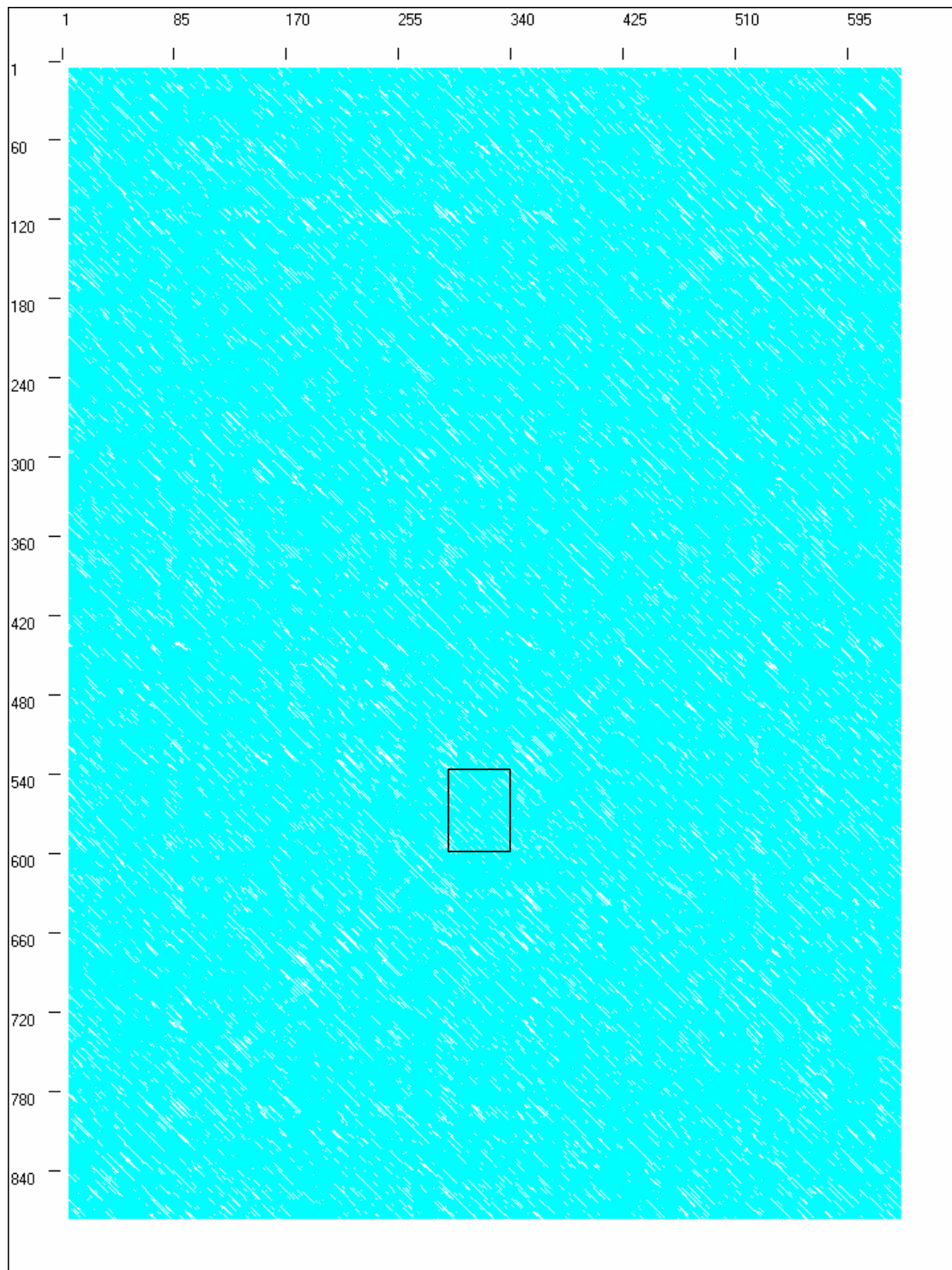


Repeat start-stop: 281145-281183
Unit: CCGCGCAATGC
Tandem array: CCGTCGCCATACCCGCGCCGAATGCCGCGCAATGACCG
Denoeud report variant of 241
VNTRfinder report variant of 0

Denoeud: 281145-281183 versus 2163596-2163317

MC58, repeat at 23260-23284 +/- 300nt flanks

MC22491, repeat at 256713-256734 +/- 300nt flanks

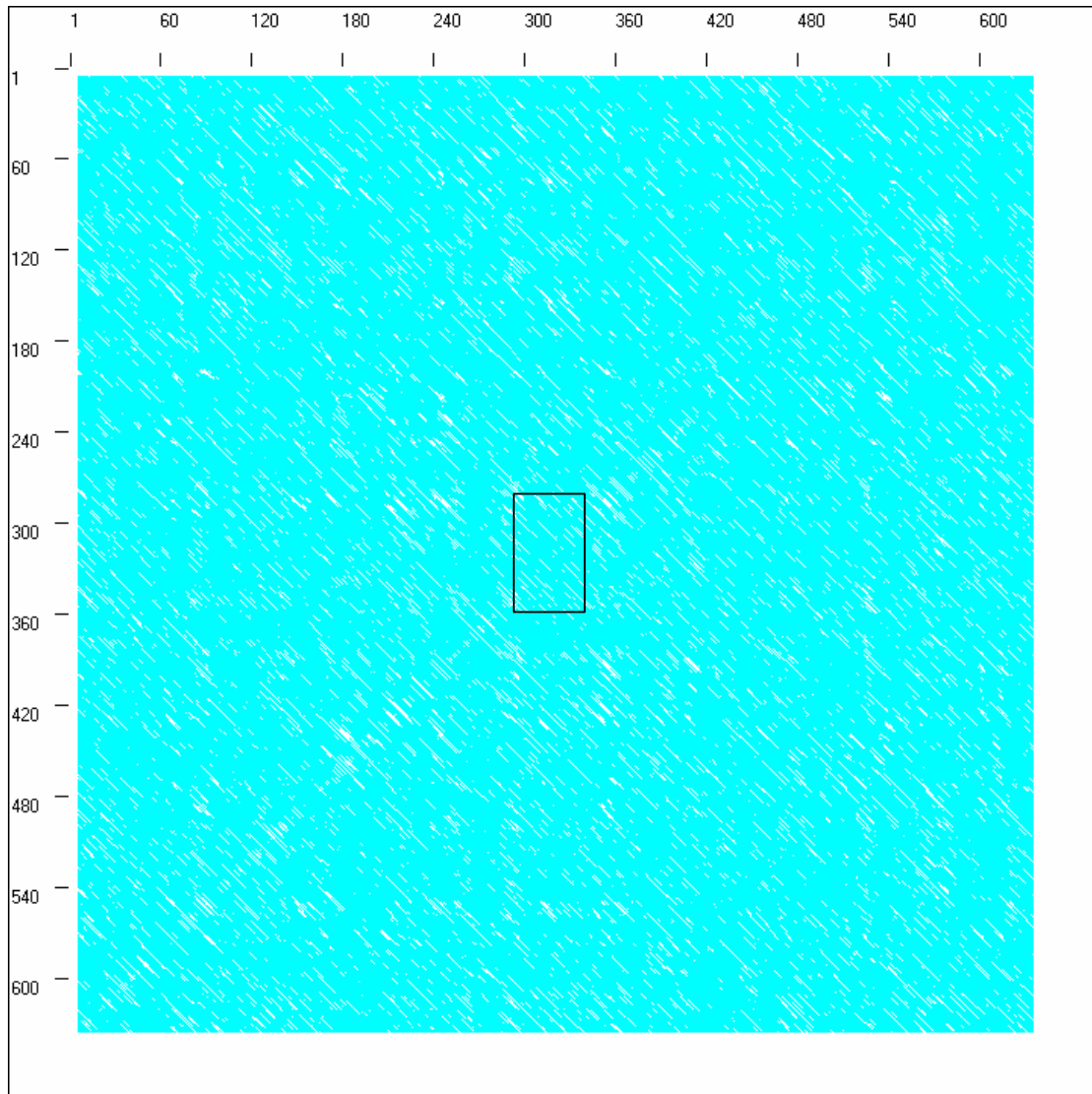


VNTRfinder: 281145-281183

2163558-2163596

MC58, repeat at 23260-23284 +/- 300nt flanks

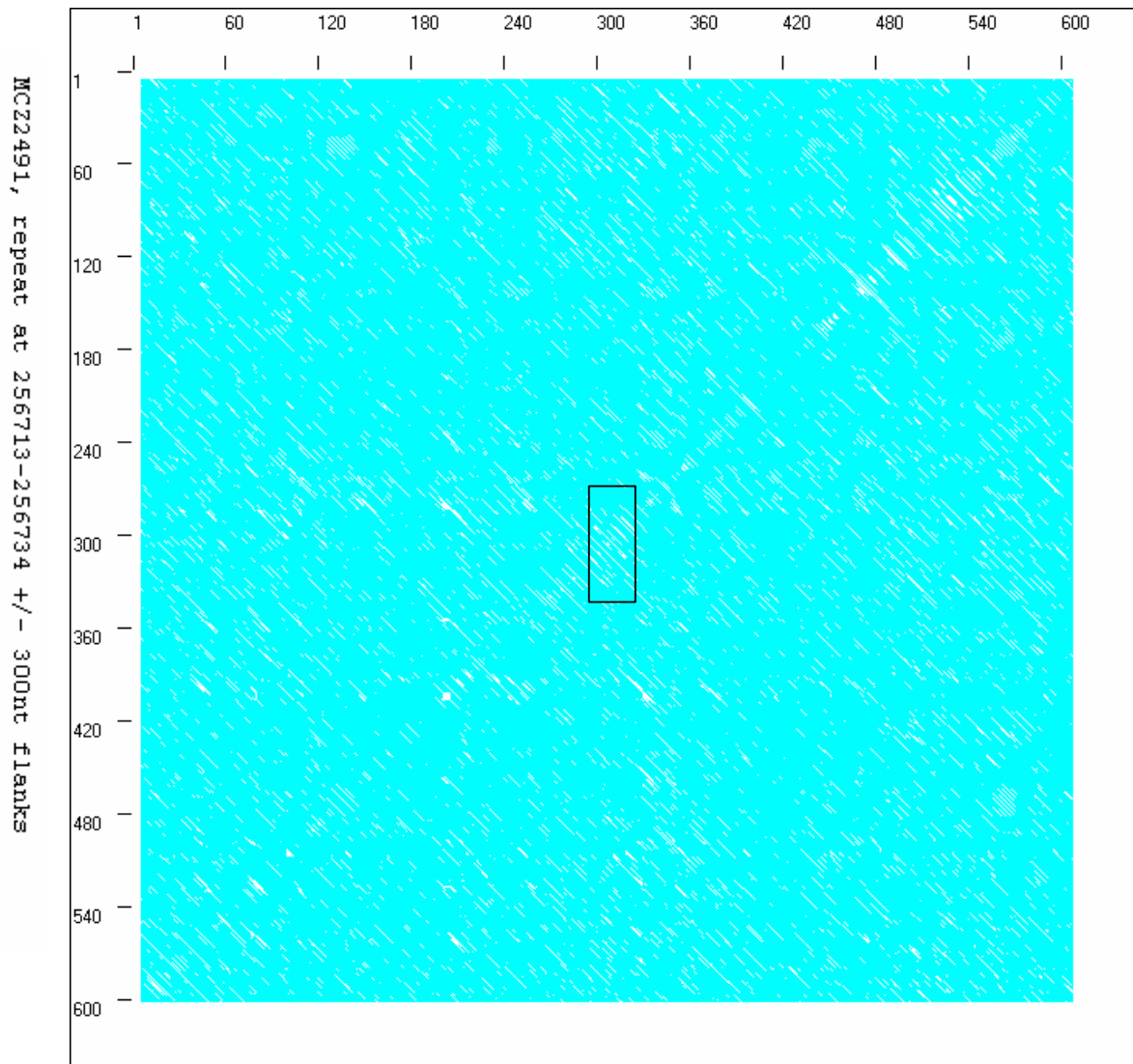
MC22491, repeat at 256713-256734 +/- 300nt flanks



Repeat start-stop: 370747-370757
Unit: ACGGT
Tandem array: ACGGTACGGTA
Denoeud report variant of 6
VNTRfinder report variant of 0

Denoeud: 370747-370757 versus 2074675-2074671

MC58, repeat at 23260-23284 +/- 300nt flanks

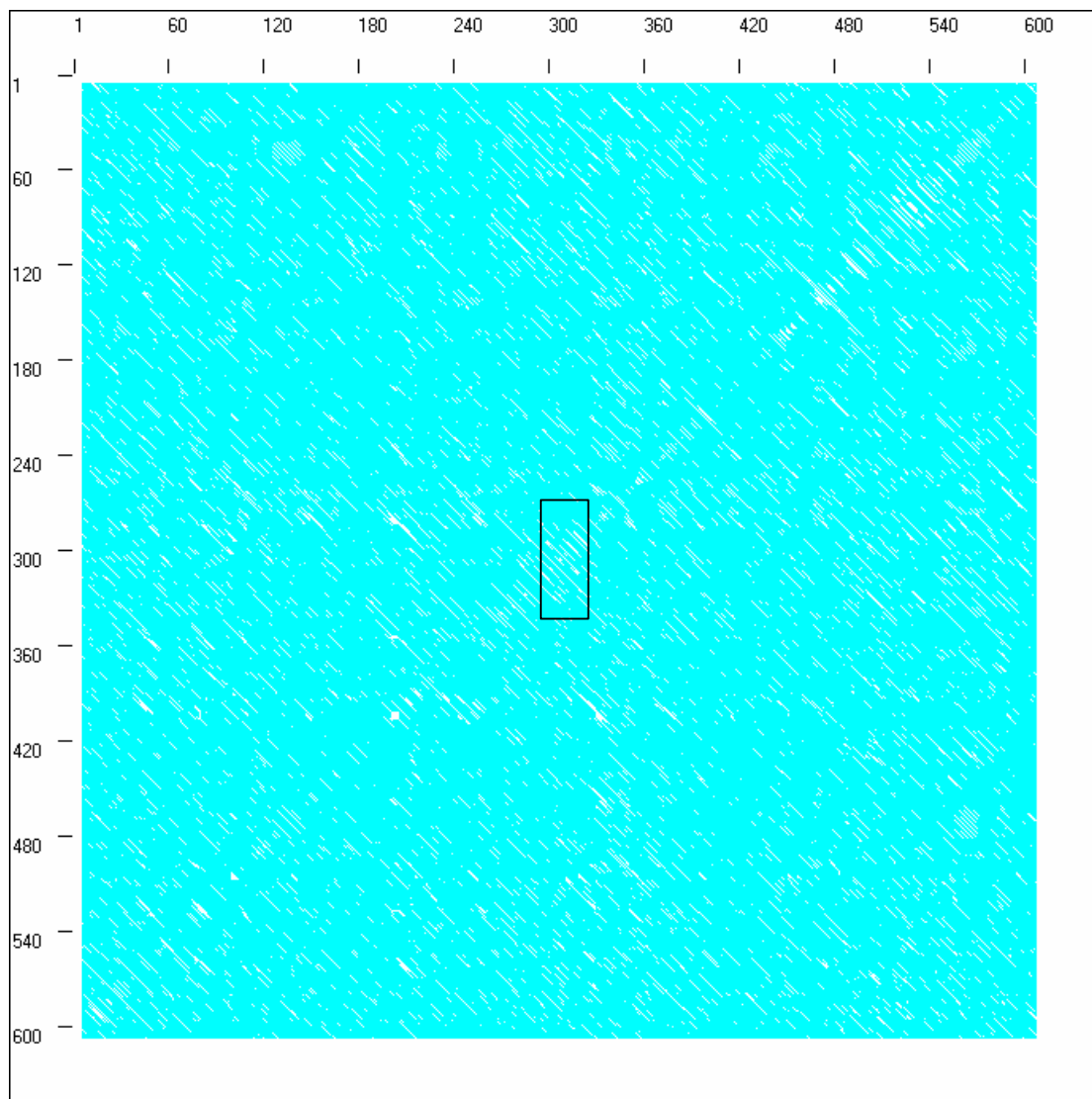


VNTRfinder: 370747-370757

2074671-2074681

MC58, repeat at 23260-23284 +/- 300nt flanks

MC22491, repeat at 256713-256734 +/- 300nt flanks

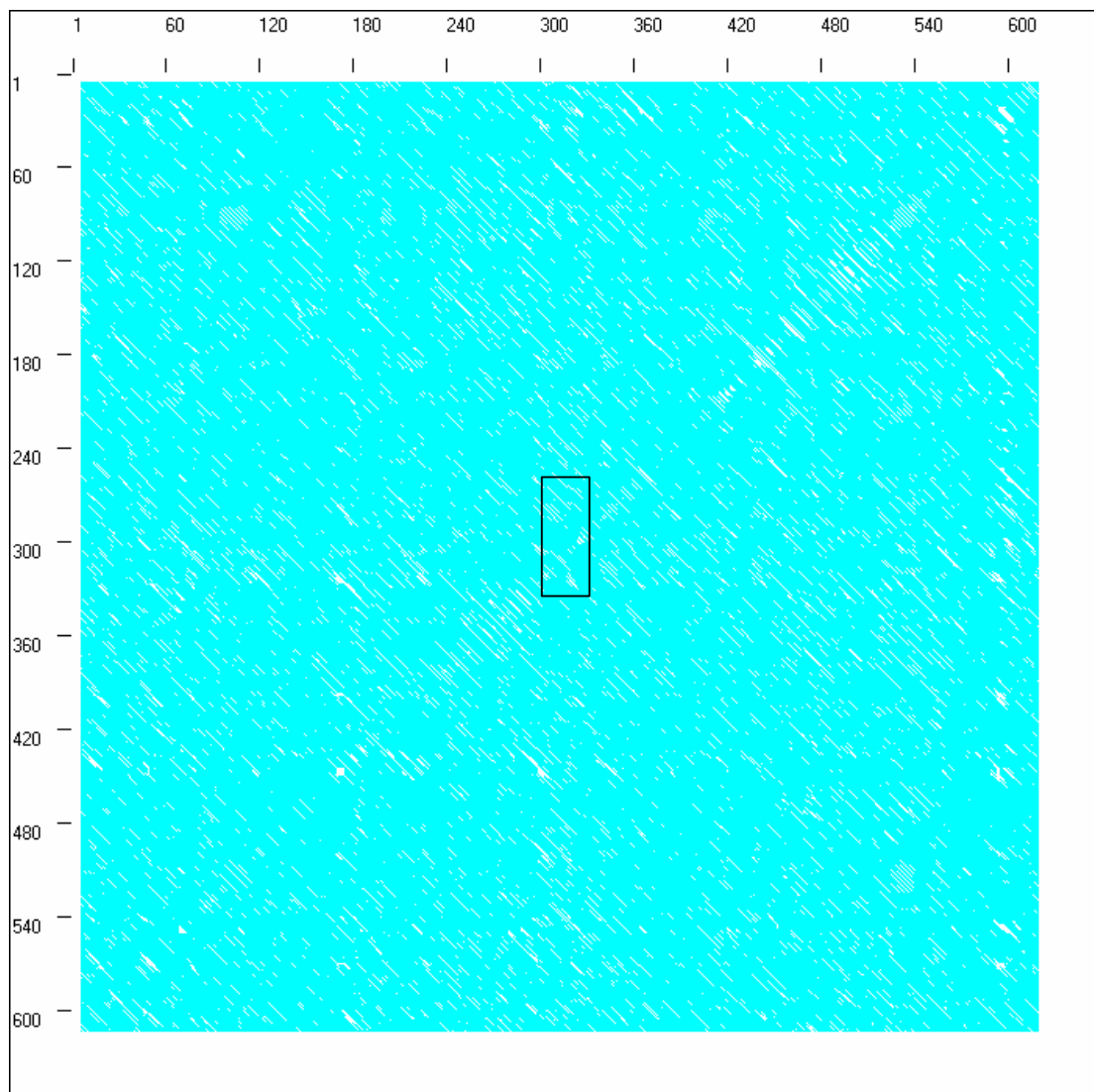


Repeat start-stop: 370778-370800
Unit: AGC
Tandem array: AGCAGCAGCTCACACAGCAGGAG
Denoeud report variant of 6
VNTRfinder report variant of 0

Denoeud: 370778-370800 versus 2074644-2074628

MC58, repeat at 23260-23284 +/- 300nt flanks

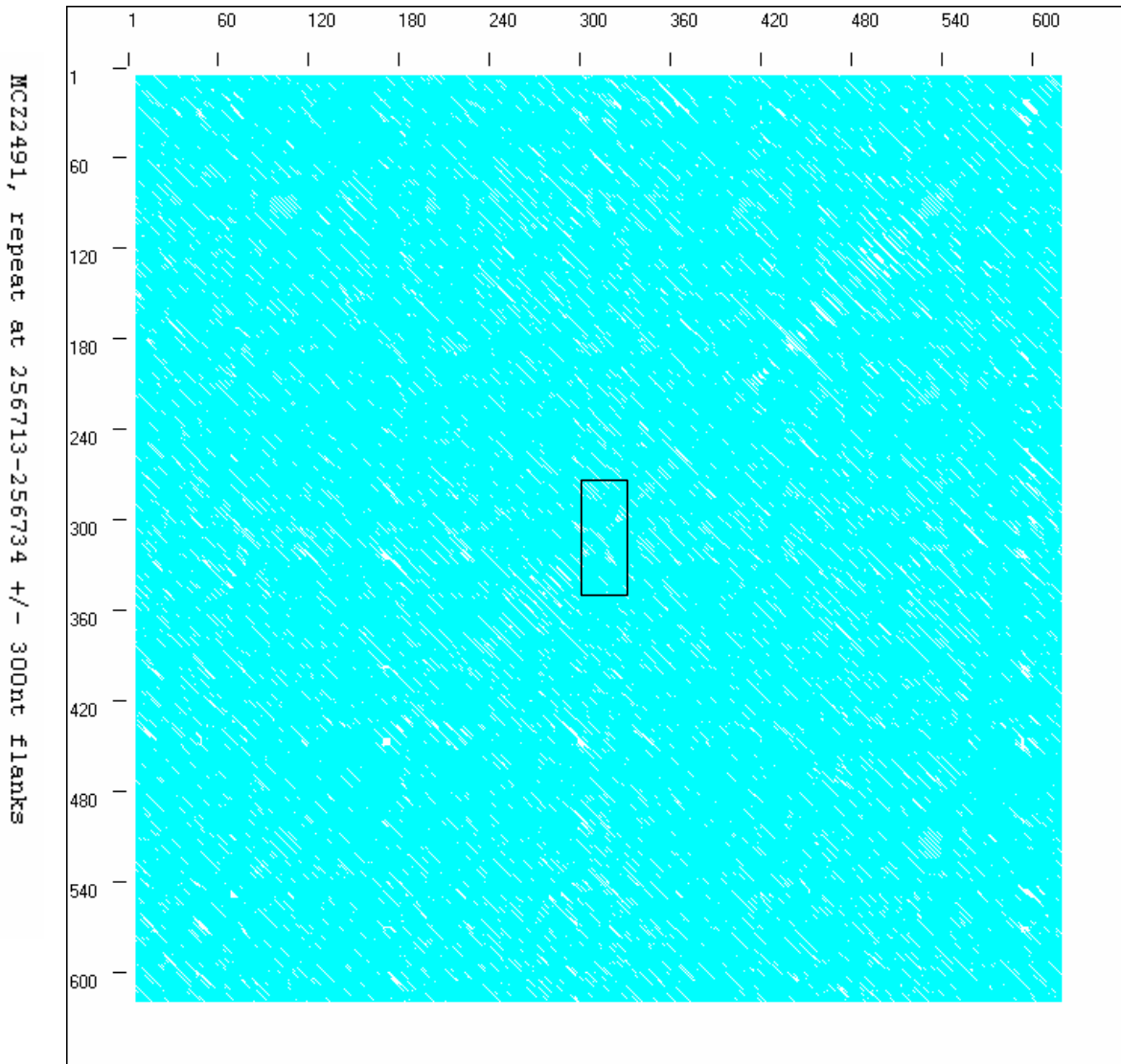
MC22491, repeat at 256713-256734 +/- 300nt flanks



VNTRfinder: 370778-370800

2074628-2074650

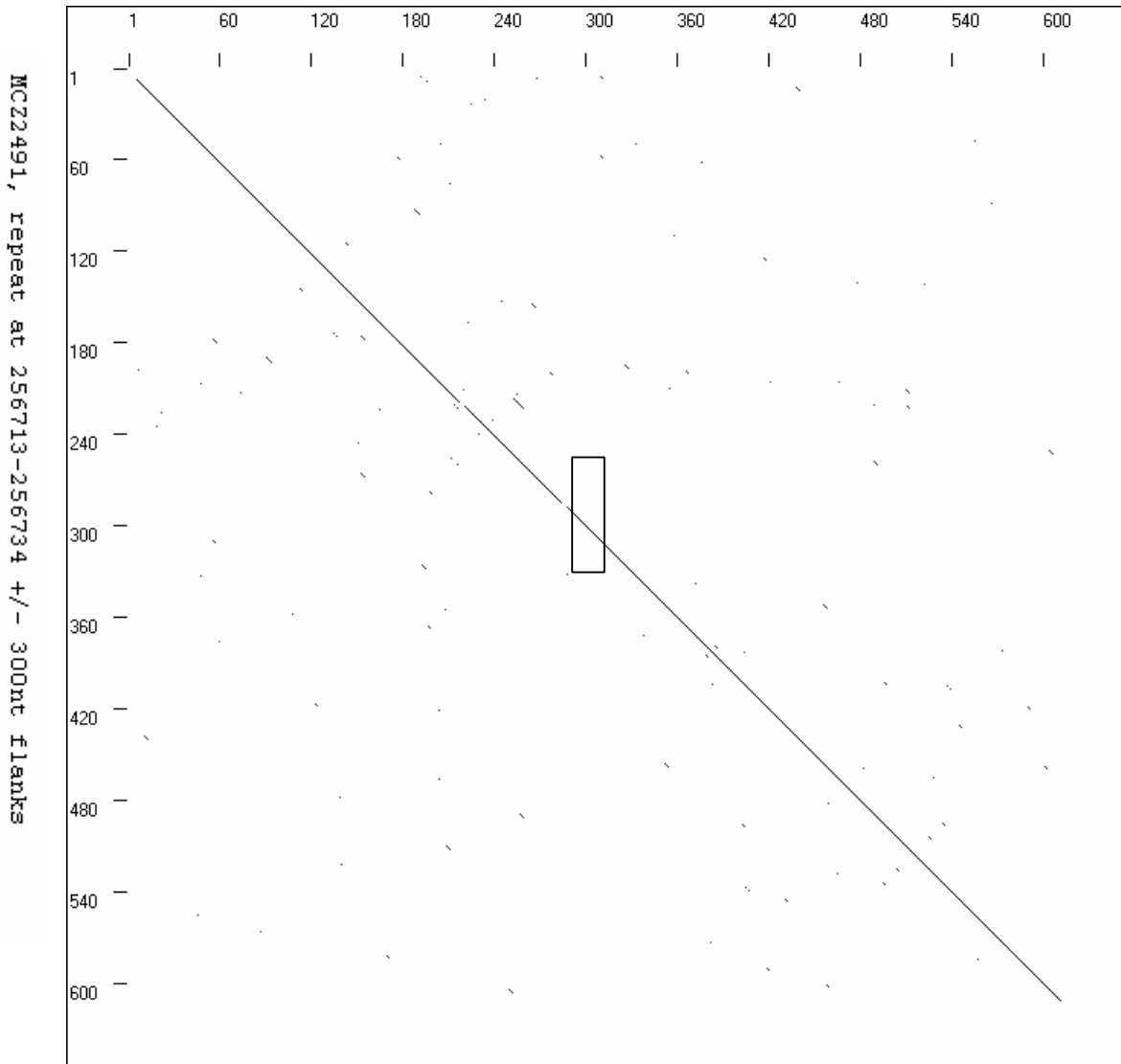
MC58, repeat at 23260-23284 +/- 300nt flanks



Repeat start-stop: 598226-598240
Unit: GATTT
Tandem array: GATATTGATTTGATT
Denoeud report variant of 0
VNTRfinder report variant of 1

Denoeud: 598226-598240 versus 745362-745376

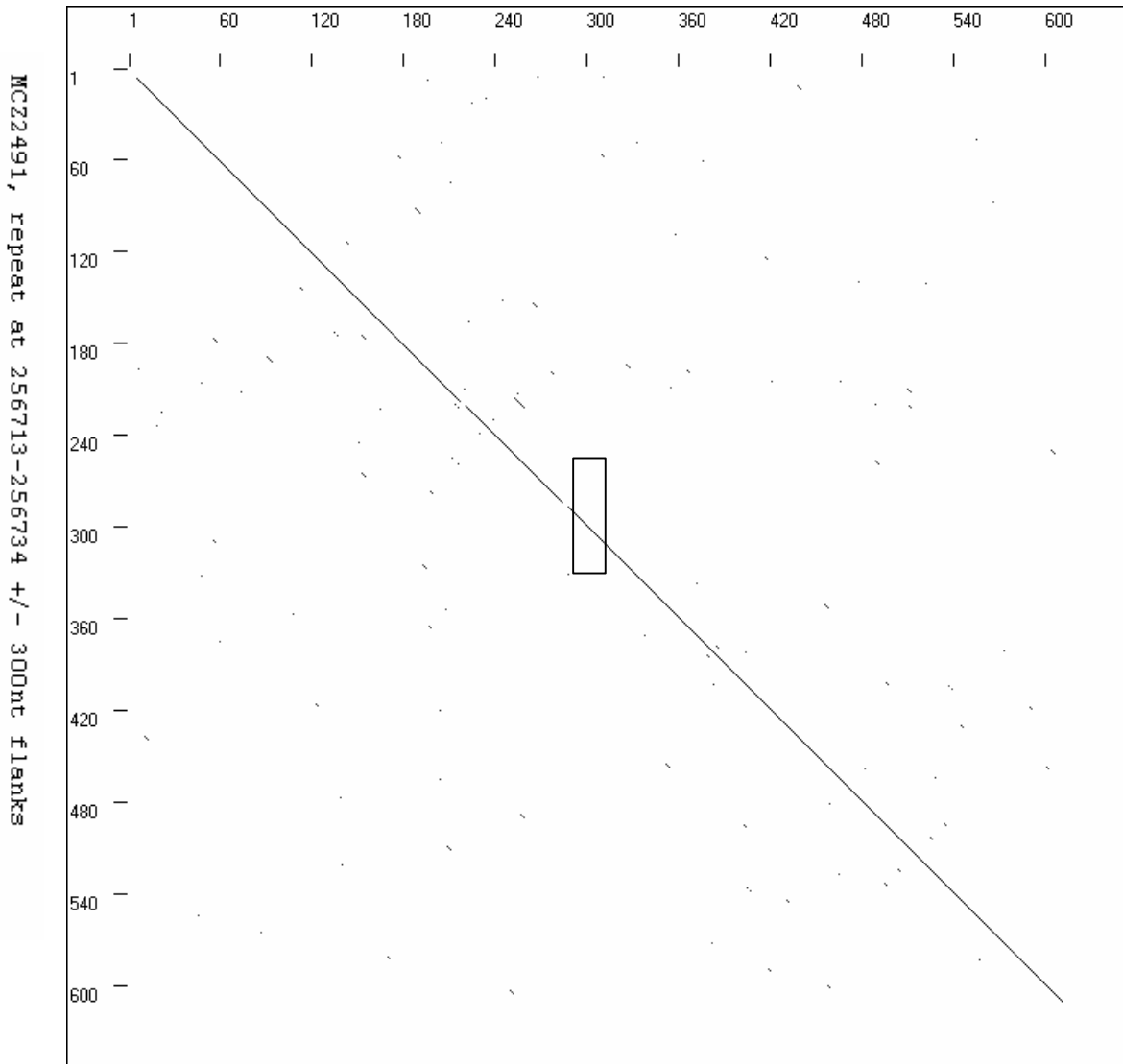
MC58, repeat at 23260-23284 +/- 300nt flanks



VNTRfinder: 598226-598240

745363-745376

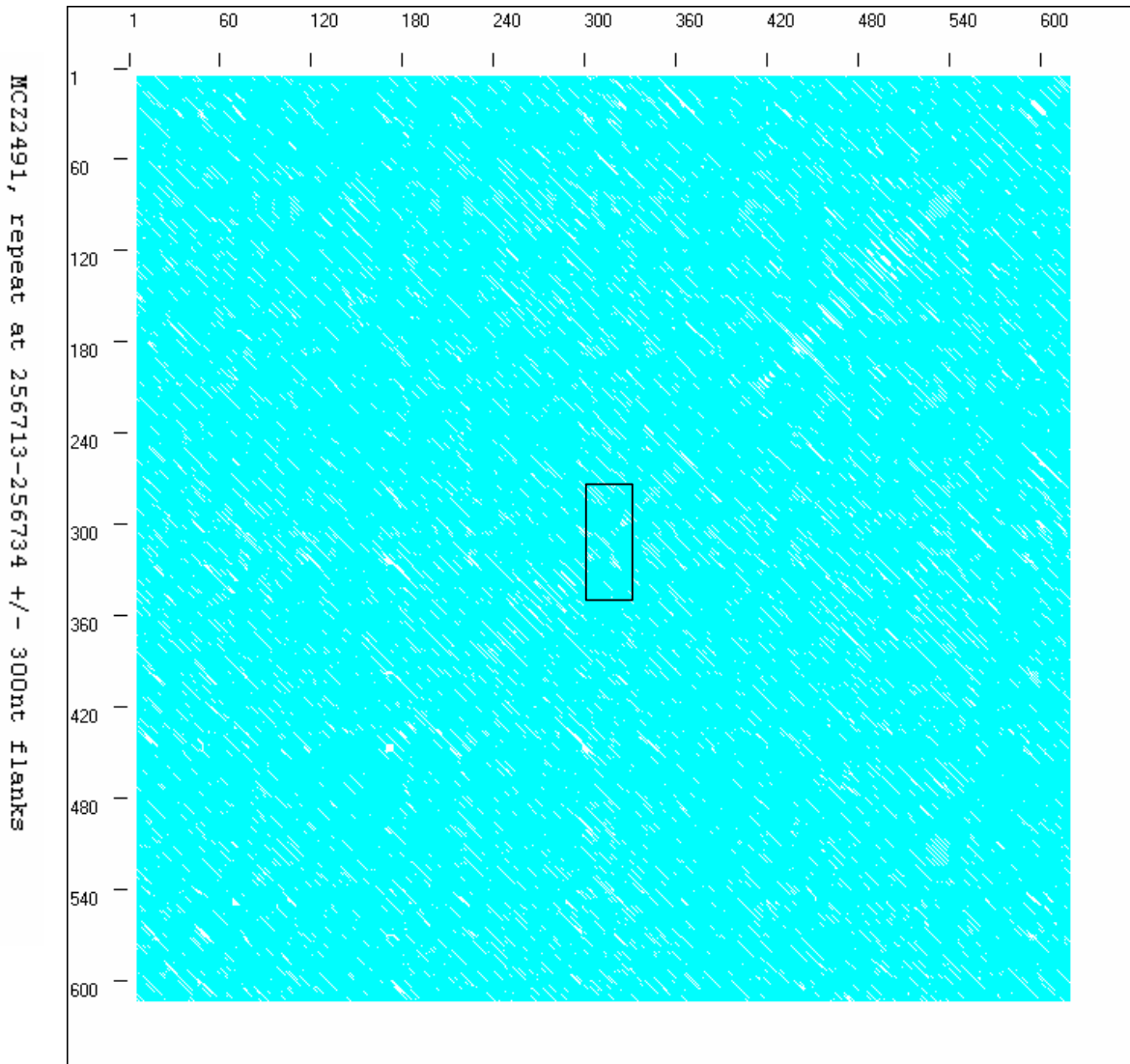
MC58, repeat at 23260-23284 +/- 300nt flanks



Repeat start-stop: 613994-614016
Unit: AGC
Tandem array: AGCAGCAGCTCACACAGCAGGAG
Denoeud report variant of 6
VNTRfinder report variant of 0

Denoeud: 613994-614016 2074644-2074628

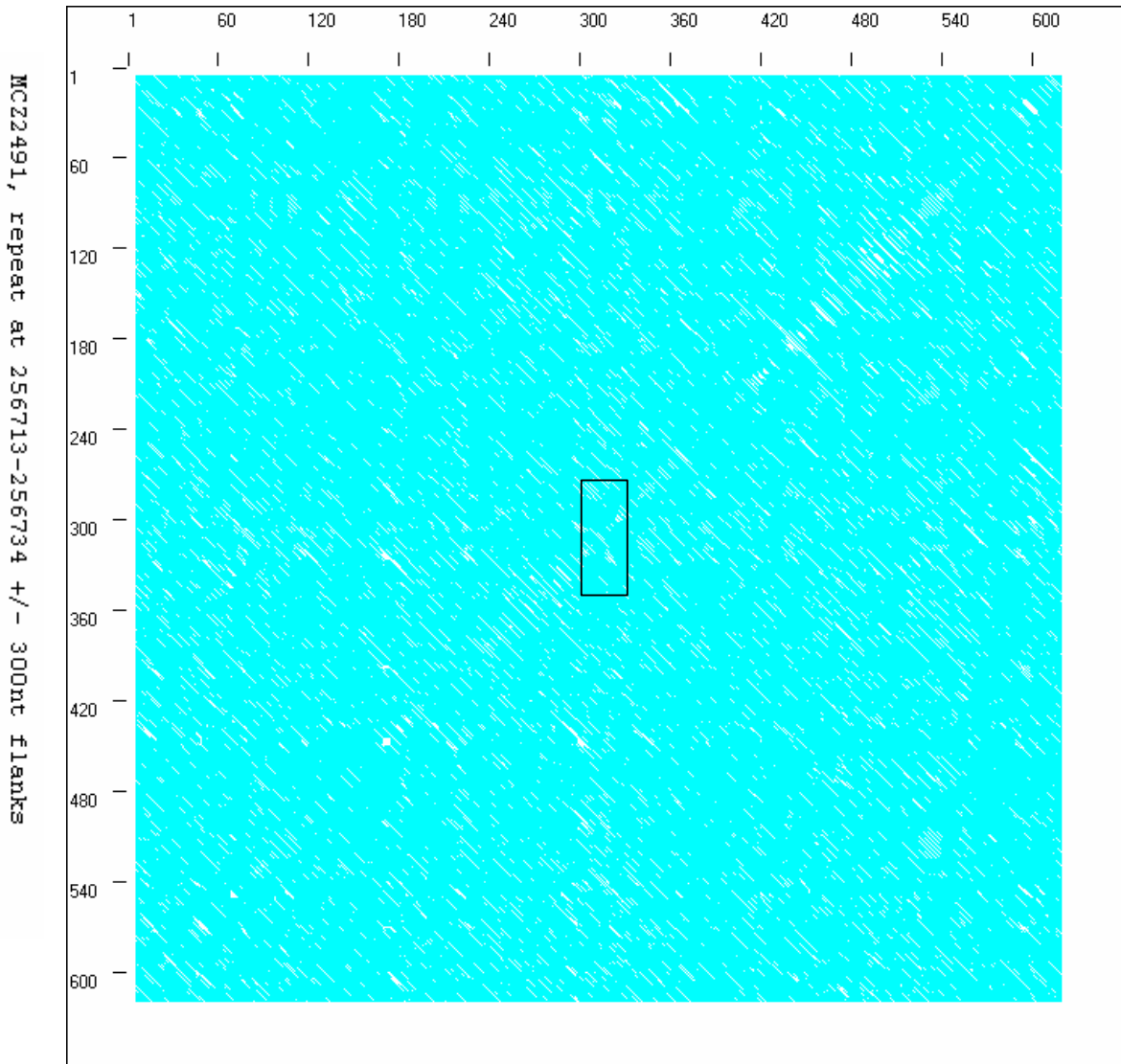
MC58, repeat at 23260-23284 +/- 300nt flanks



VNTRfinder: 613994-614016

2074628-2074650

MC58, repeat at 23260-23284 +/- 300nt flanks



Repeat start-stop: 794146-794168

Unit: CATTGTTGTT

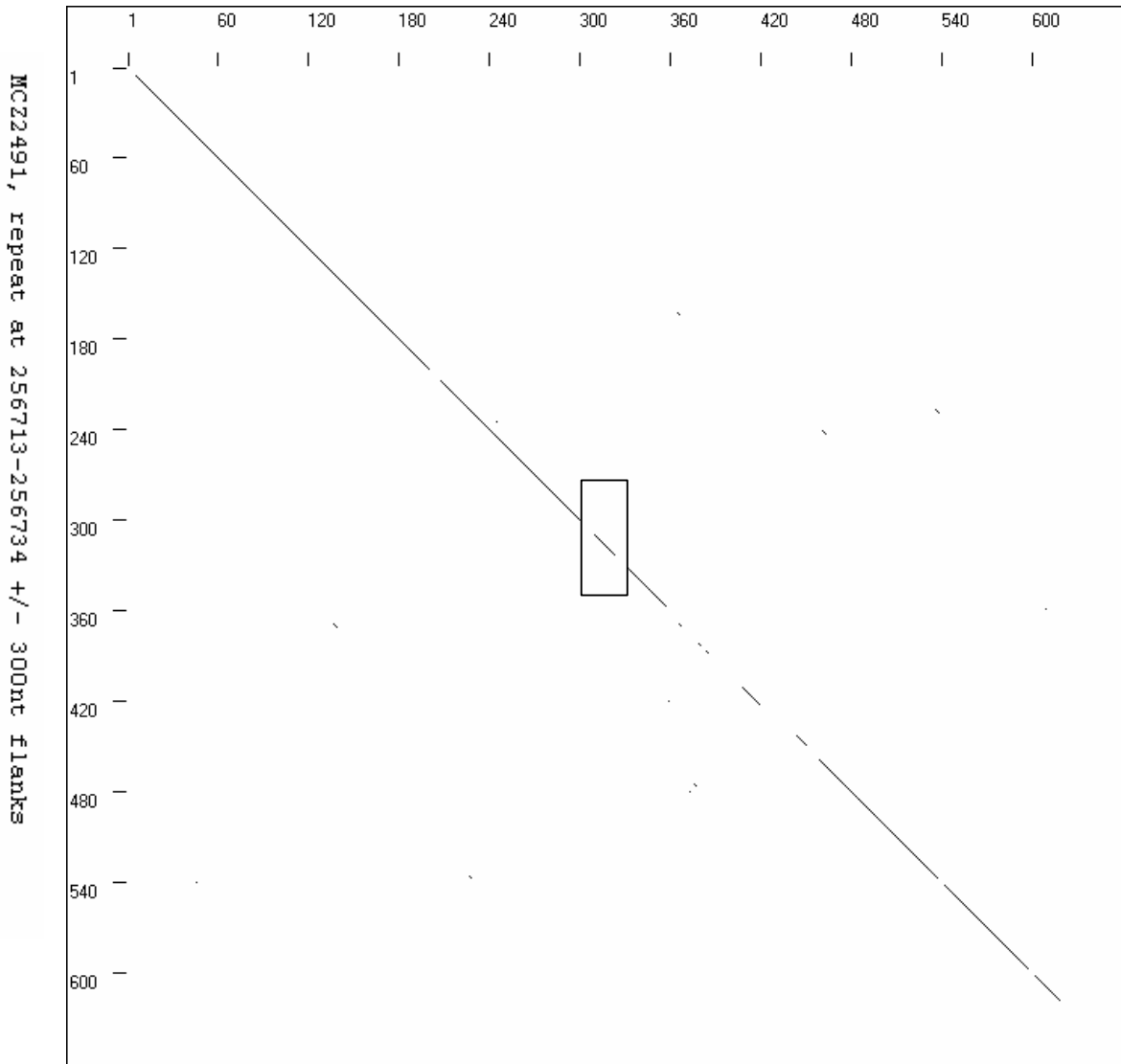
Tandem array: CATTGTTTCATTGTTGTTTCCTT

Denoeud report variant of 1

VNTRfinder report variant of 0

Denoeud: 794146-794168 941942-941963

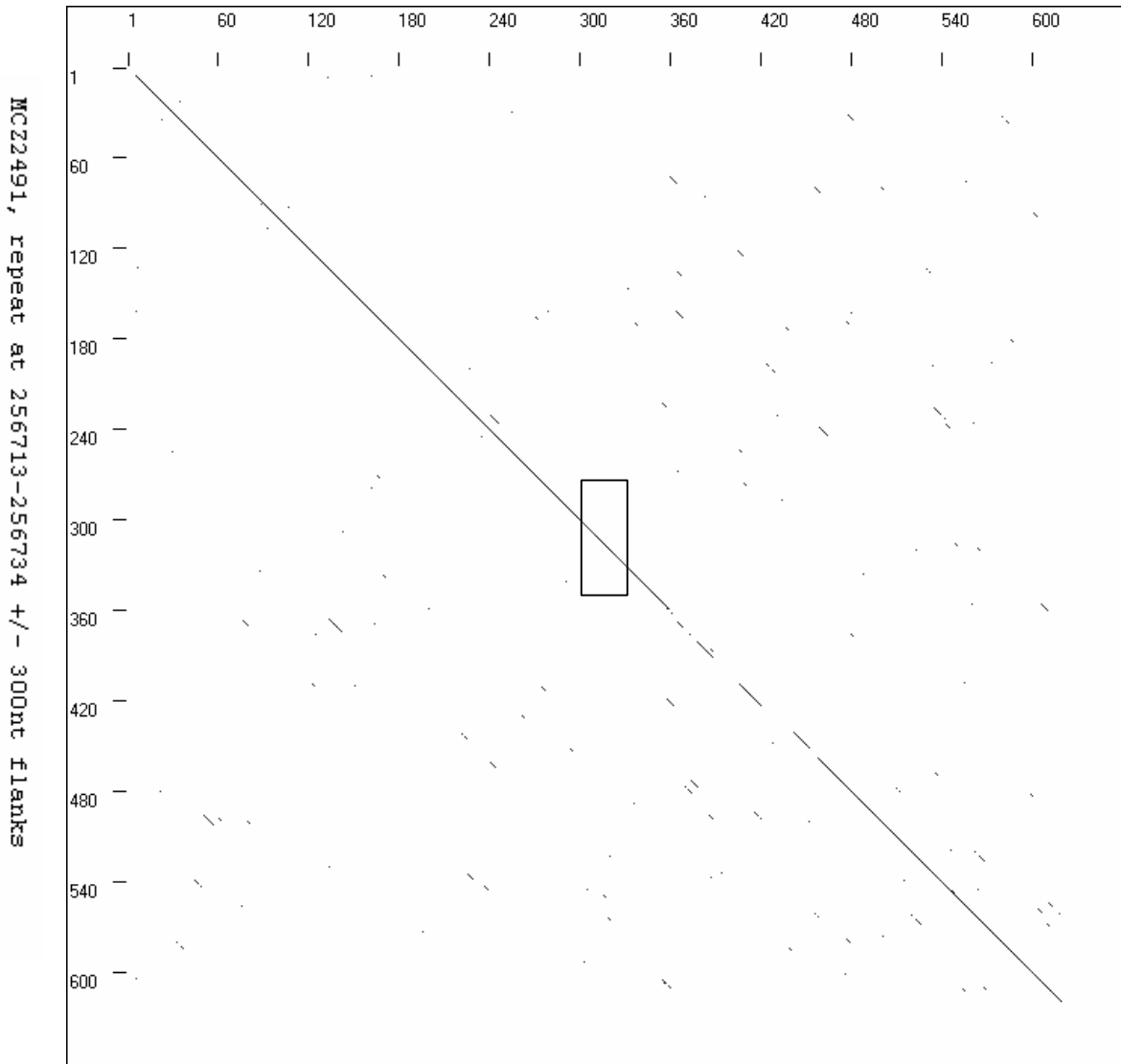
MC58, repeat at 23260-23284 +/- 300nt flanks



VNTRfinder: 794146-794168

941942-941964

MC58, repeat at 23260-23284 +/- 300nt flanks

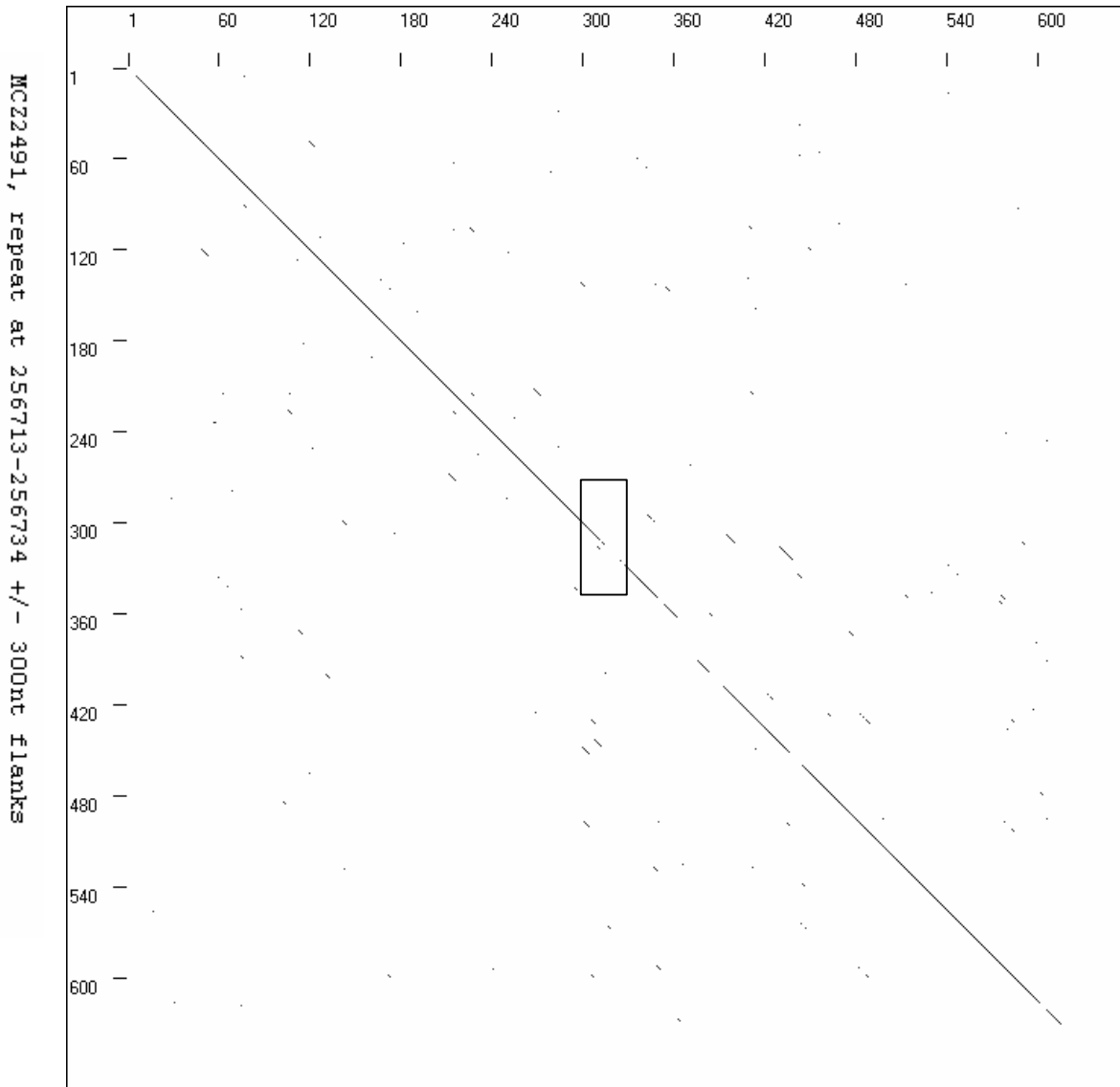


Repeat start-stop: 1340997-1341015
Unit: TGGCGGCTG
Tandem array: TGGCGGCTGTGGCTGCTGT
Denoeud report variant of 15
VNTRfinder report variant of 0

Denoeud: 1340997-1341015

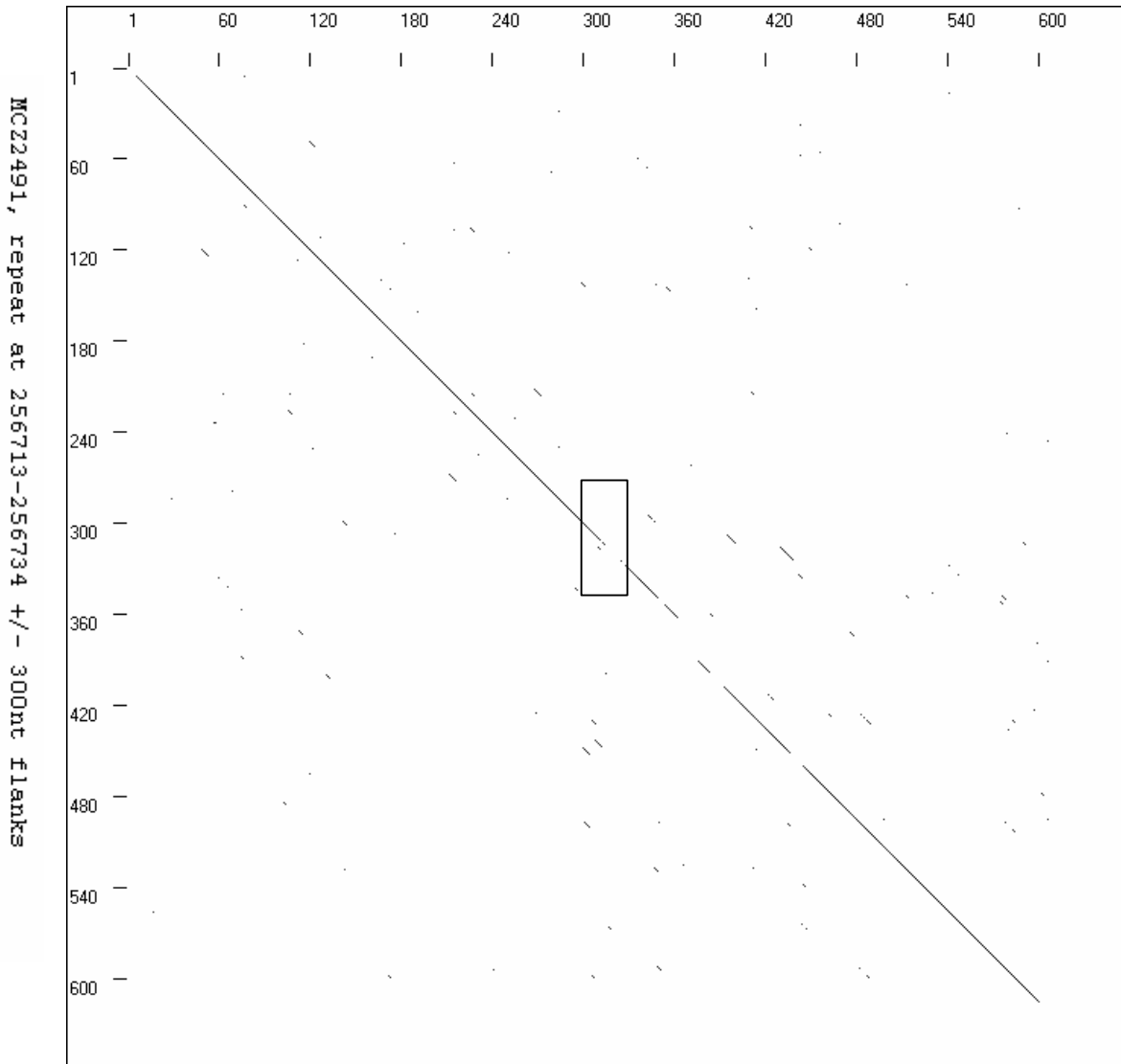
1432907-1432940

MC58, repeat at 23260-23284 +/- 300nt flanks



VNTRfinder: 1340997-1341015 1432907-1432925

MC58, repeat at 23260-23284 +/- 300nt flanks



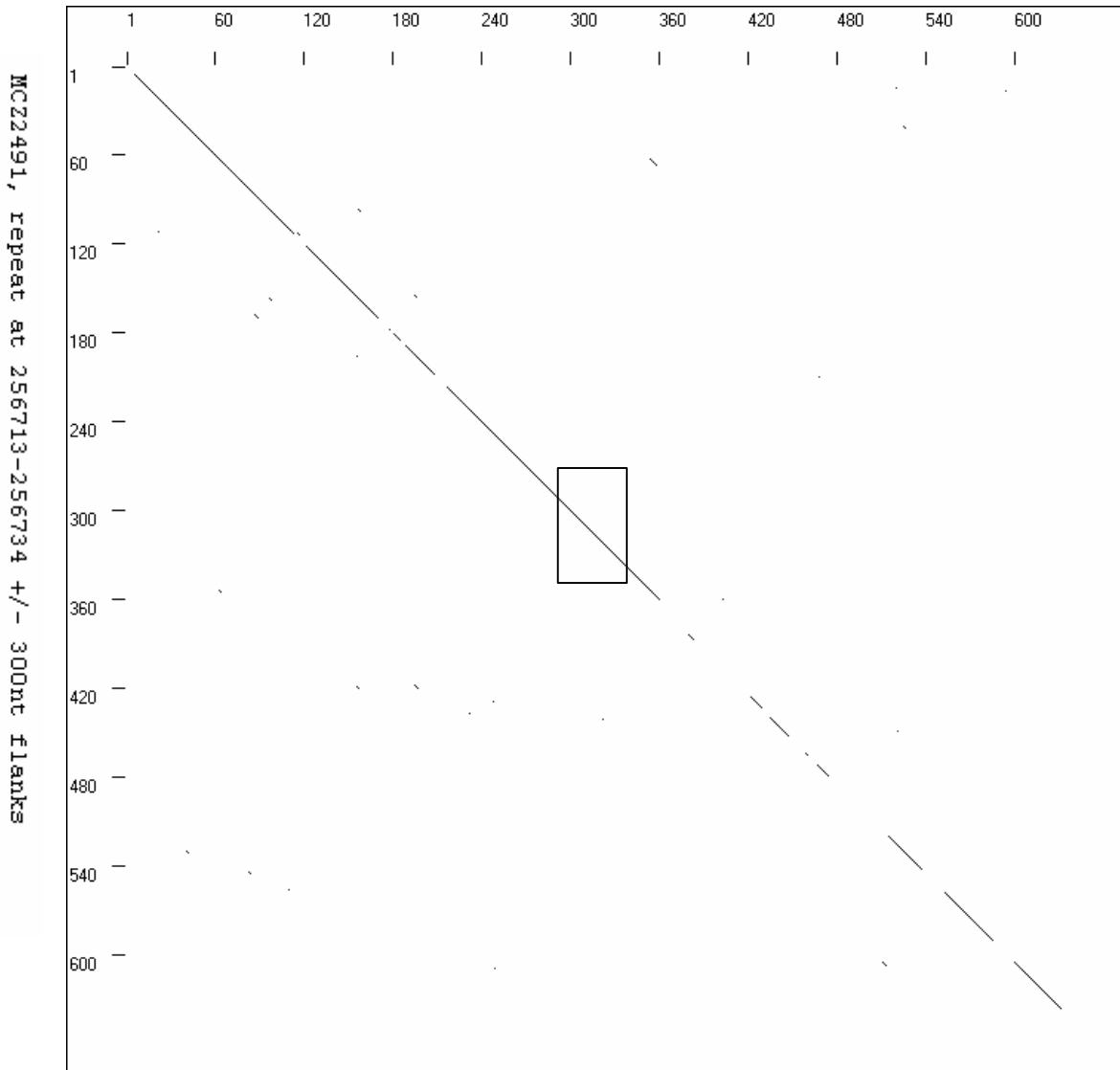
Repeat start-stop: 1443509-1443531
Unit: AGC
Tandem array: AGCAGCAGCTCACACAGCAGGAG
Denoeud report variant of 6
VNTRfinder report variant of 0

Denoeud: 1443509-1443531 2074644-2074628
VNTRfinder: 1443509-1443531 2074628-2074650
(Same problematic sequence as before)

Repeat start-stop: 1452043-1452078
Unit: TTTG
Tandem array: TTTGCTCATTTTTTCTTTCAATGTTATTTTGTGTTG
Denoeud report variant of 4
VNTRfinder report variant of 0

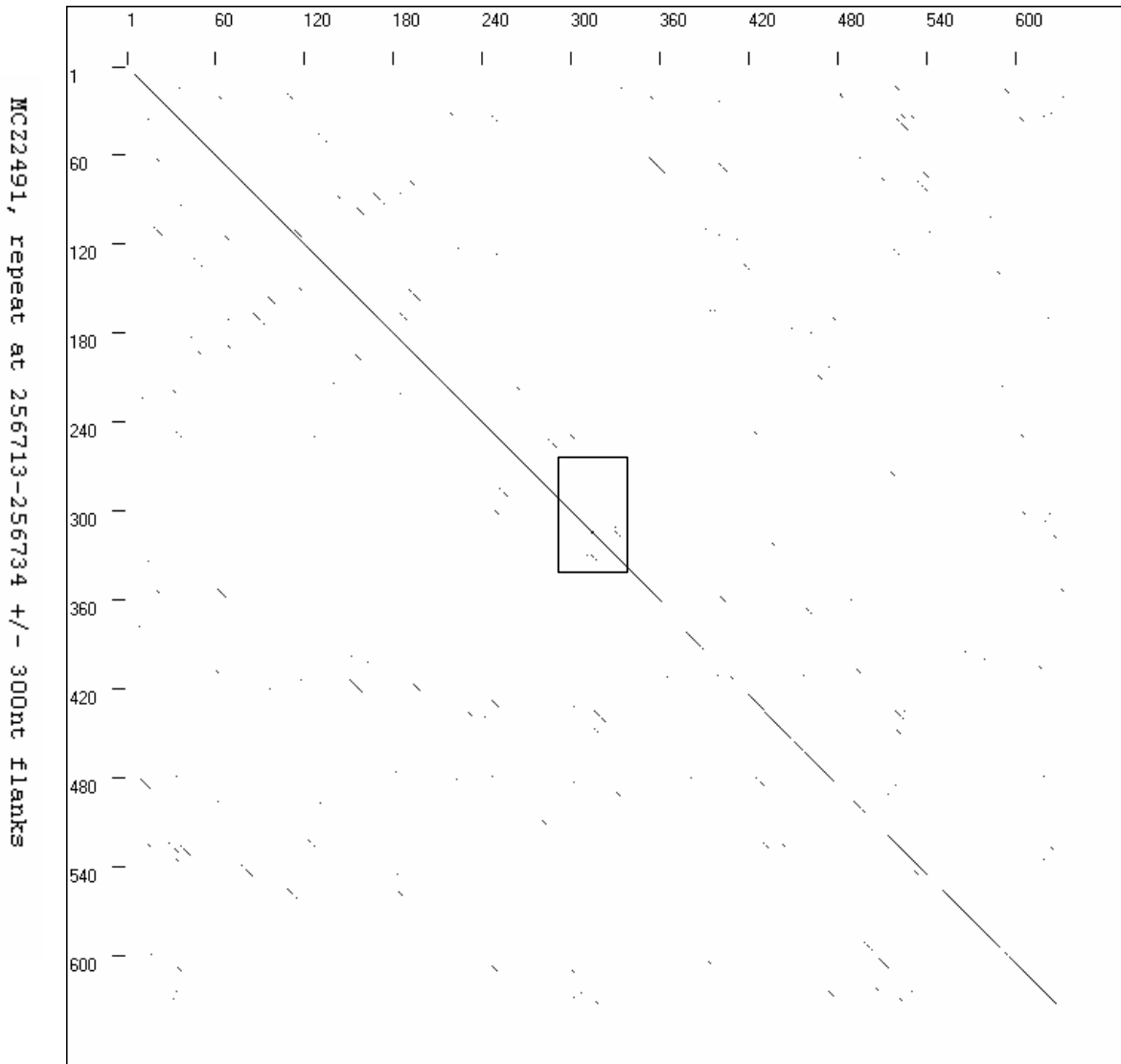
Denoeud: 1452043-1452078 1535314-1535353

MC58, repeat at 23260-23284 +/- 300nt flanks



VNTRfinder: 1452043-1452078 1535314-1535349

MC58, repeat at 23260-23284 +/- 300nt flanks



Repeat start-stop: 1487085-1487267

Unit:CCGTCATTCCCGCGAACGCGGGAATCTAGTAACCGAAAAACACAGGAATCTATCGGAAAAACAGAAA
CCCCGA

(75mer)

Tandem array: ...

Denoeud report variant of 0

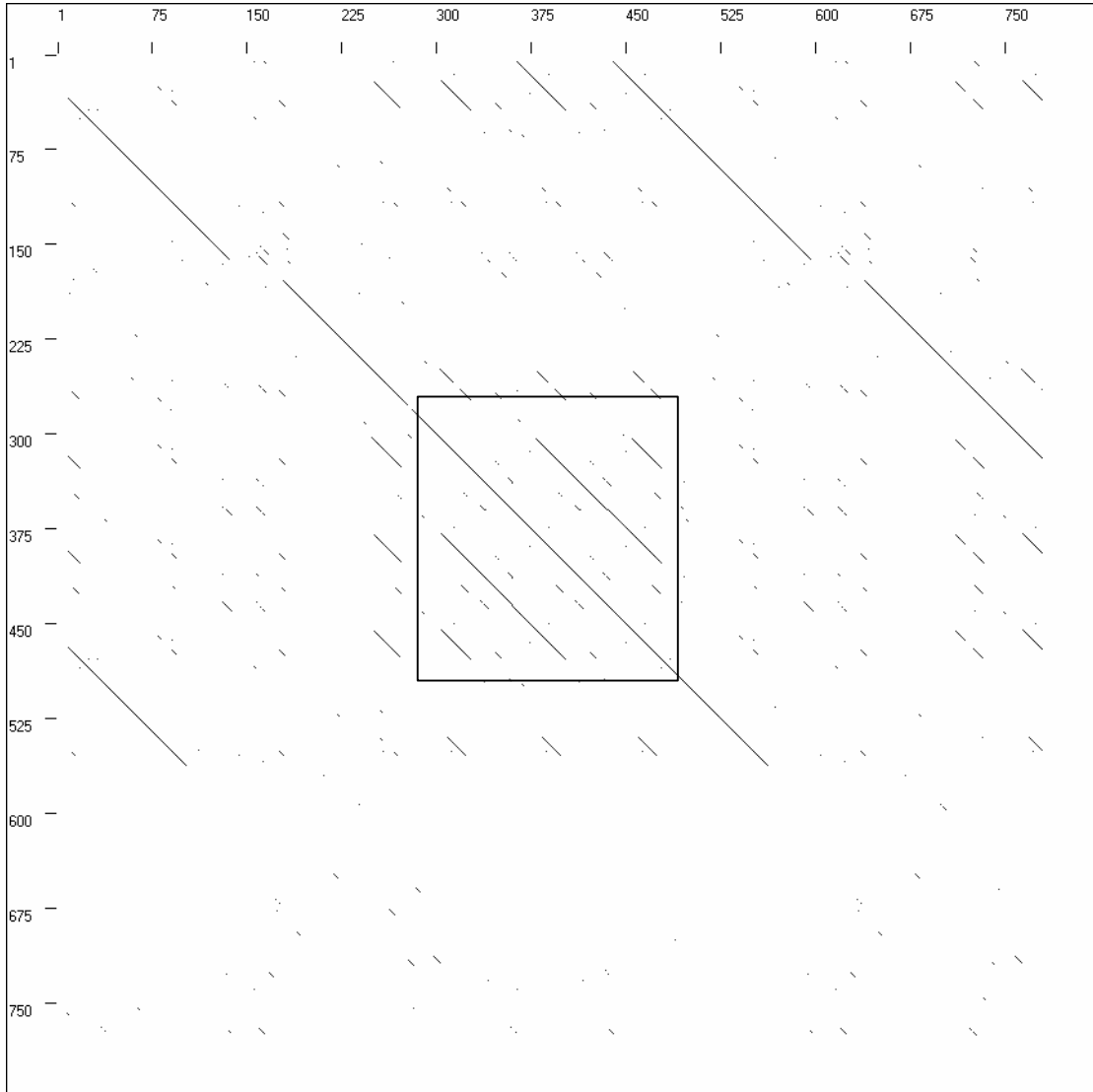
VNTRfinder report variant of 3

Denoeud: 1487085-1487267

1573652-1573834

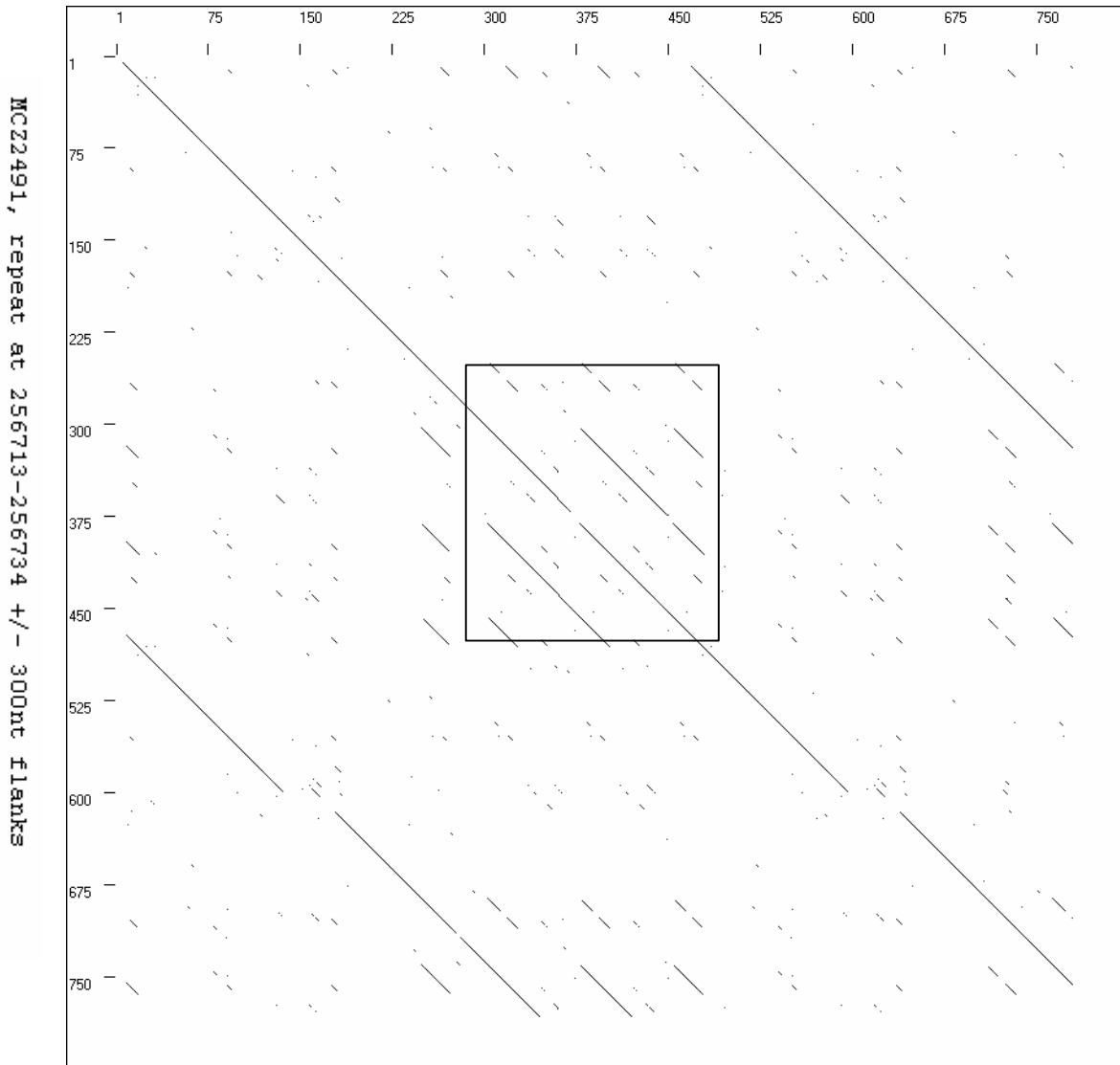
MC58, repeat at 23260-23284 +/- 300nt flanks

MC22491, repeat at 256713-256734 +/- 300nt flanks



VNTRfinder: 1487085-1487267 1573215-1573400

MC58, repeat at 23260-23284 +/- 300nt flanks



Repeat start-stop: 1527328-1527375

Unit: GTTTCACCC

Tandem array:

GTTTCAGCCGGTCACAGGCGGTTTTACCTGTTTGCGCGCGATTCA

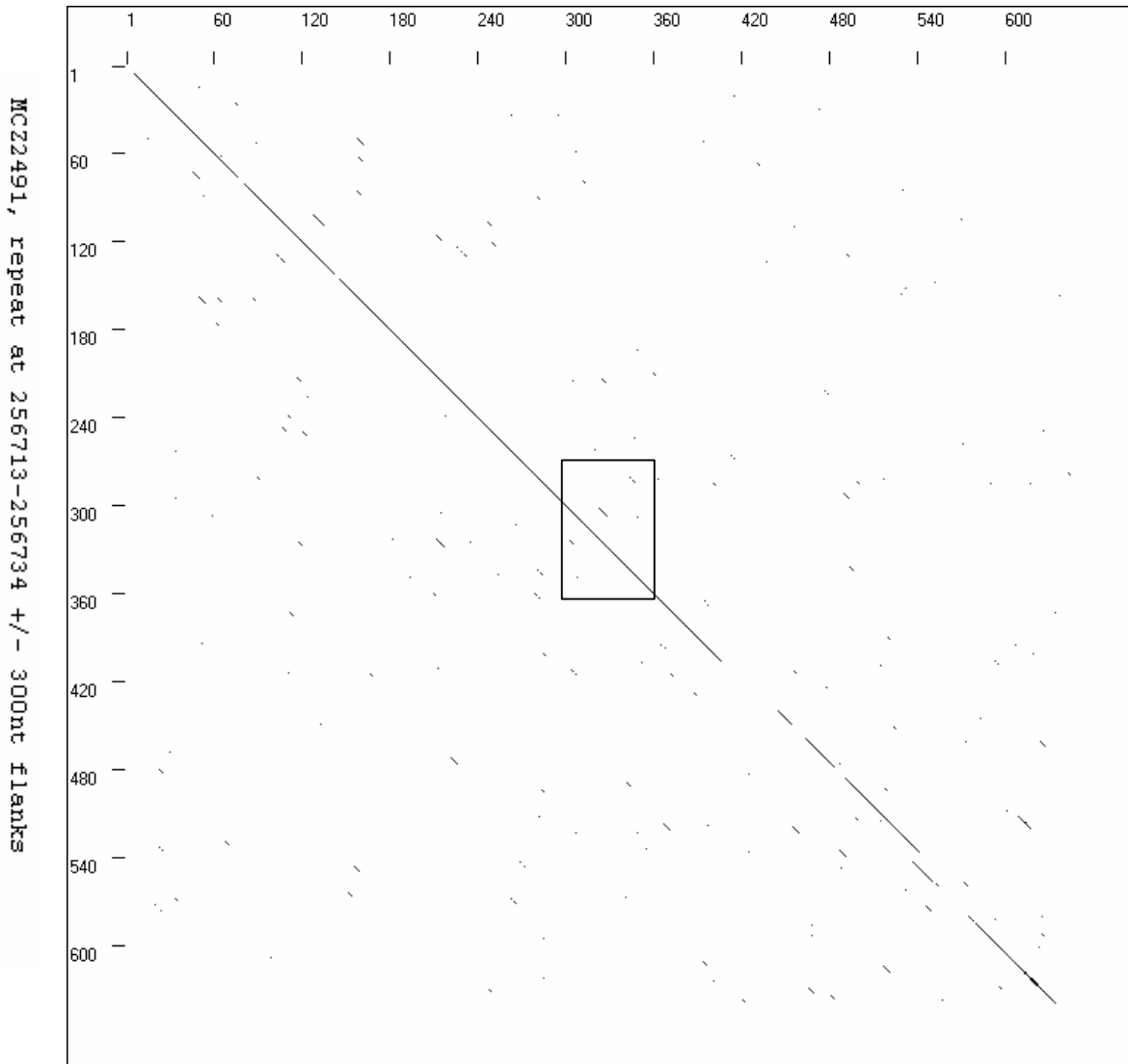
Denoeud report variant of 5

VNTRfinder report variant of 0

Denoeud: 1527328-1527375

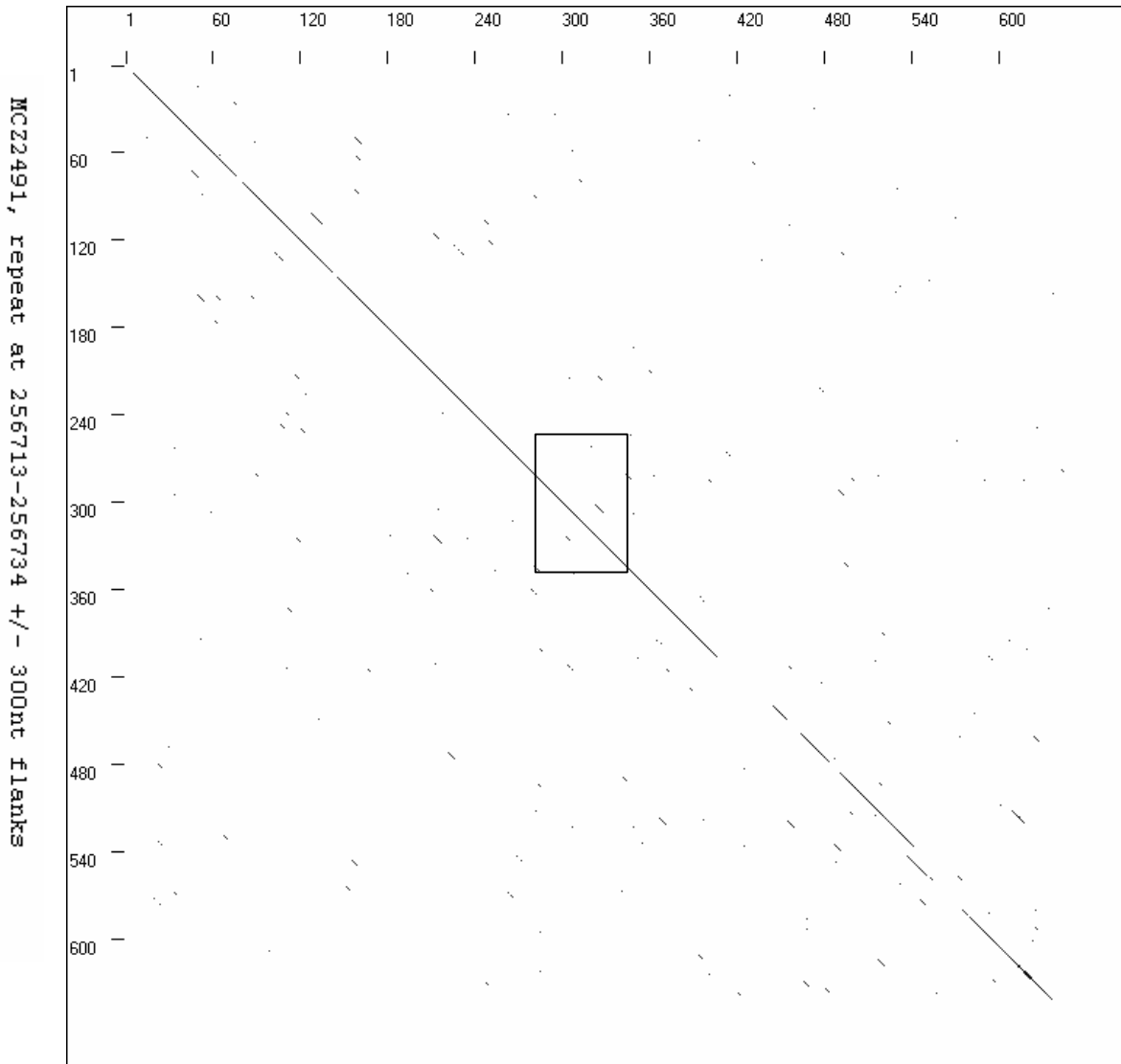
1612372-1612414

MC58, repeat at 23260-23284 +/- 300nt flanks



VNTRfinder: 1527328-1527375 1612372-1612419

MC58, repeat at 23260-23284 +/- 300nt flanks



Repeat start-stop: 1604964-1605008

Unit: AATCCCGATGCA

Tandem array:

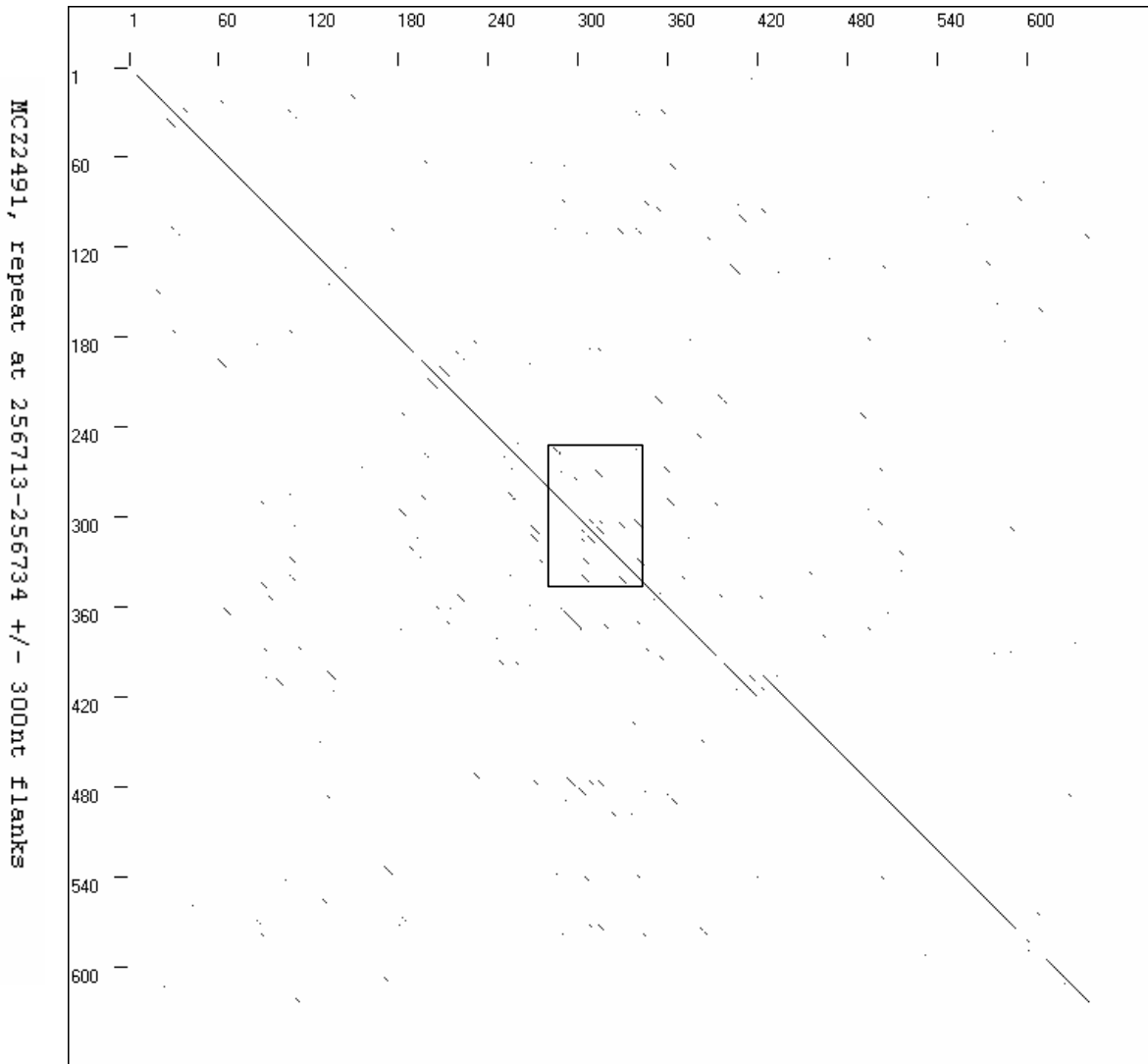
AATCCCGAACCCGACCCCGATTGAATCCCGATGCAAATCCCGAT

Denoeud report variant of 18

VNTRfinder report variant of 0

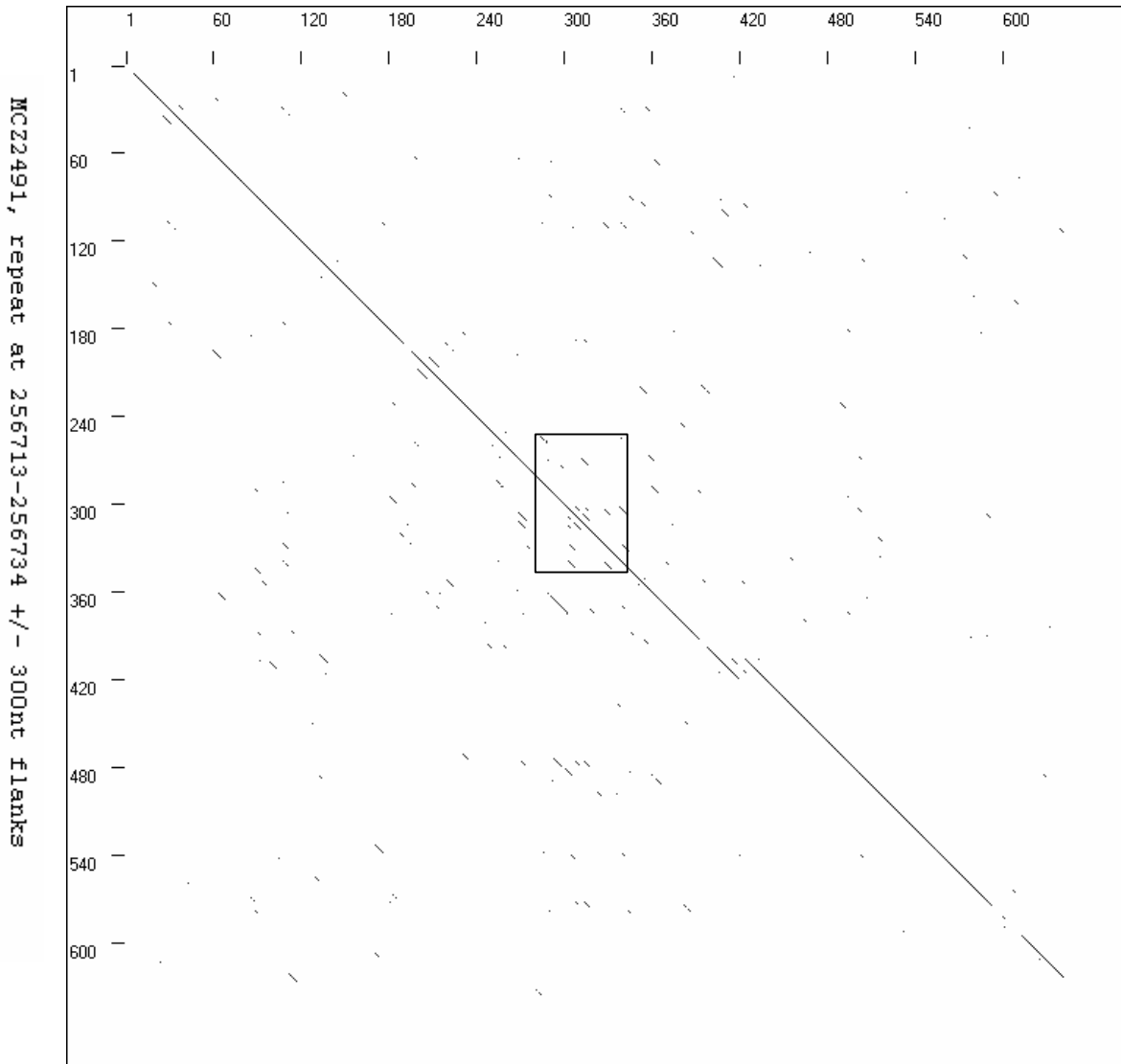
Denoeud: 1604964-1605008 1741676-1741702

MC58, repeat at 23260-23284 +/- 300nt flanks



VNTRfinder: 1604964-1605008 1741676-1741720

MC58, repeat at 23260-23284 +/- 300nt flanks



Repeat start-stop: 1694228-1694275

Unit: CGAATCGGGATT

Tandem array:

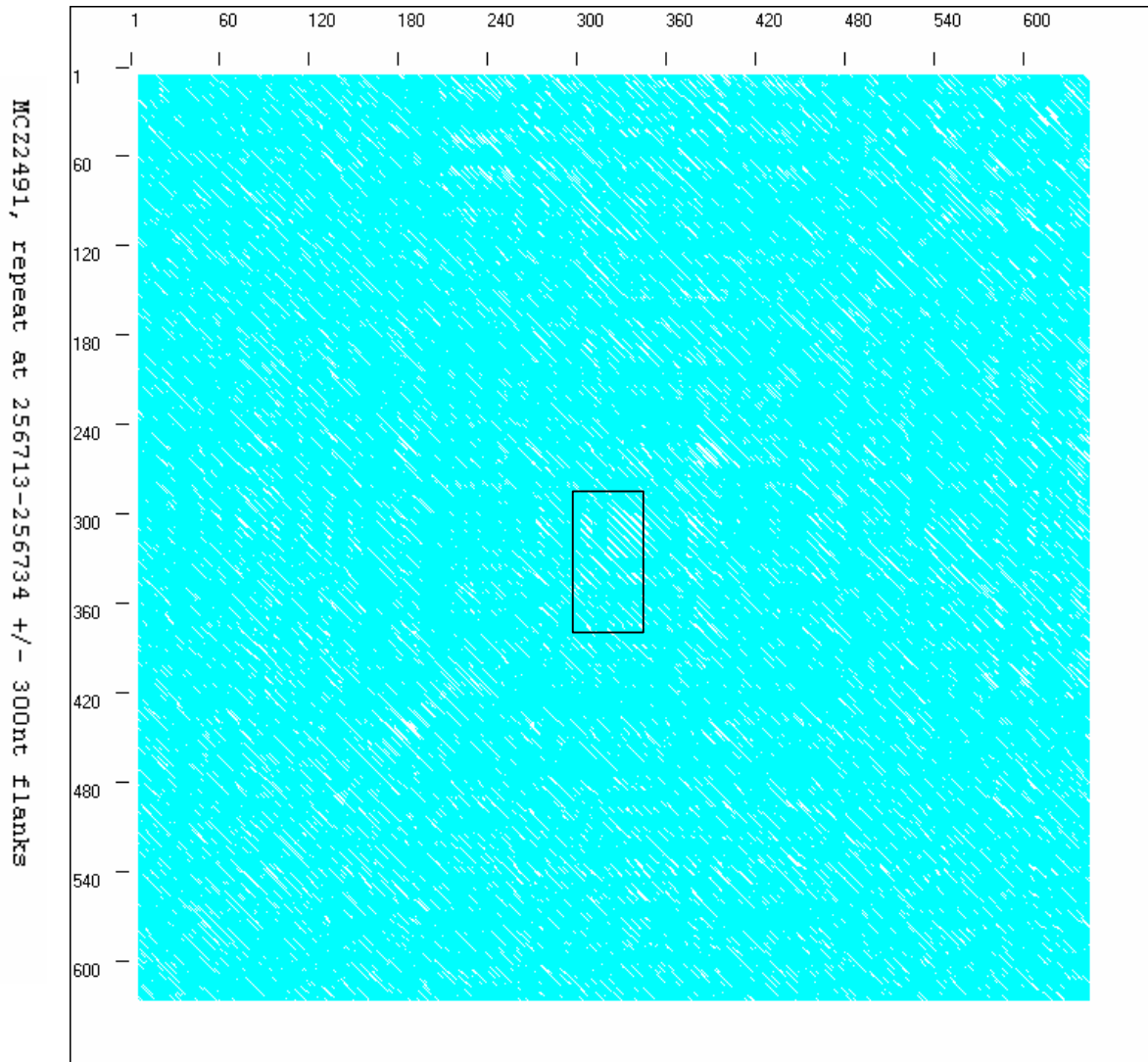
CGTATCGGGATTTGCATCGGGATTCAAATCGGGGTCGGGTTCTCGGGATT

Denoeud report variant of 18

VNTRfinder report variant of 0

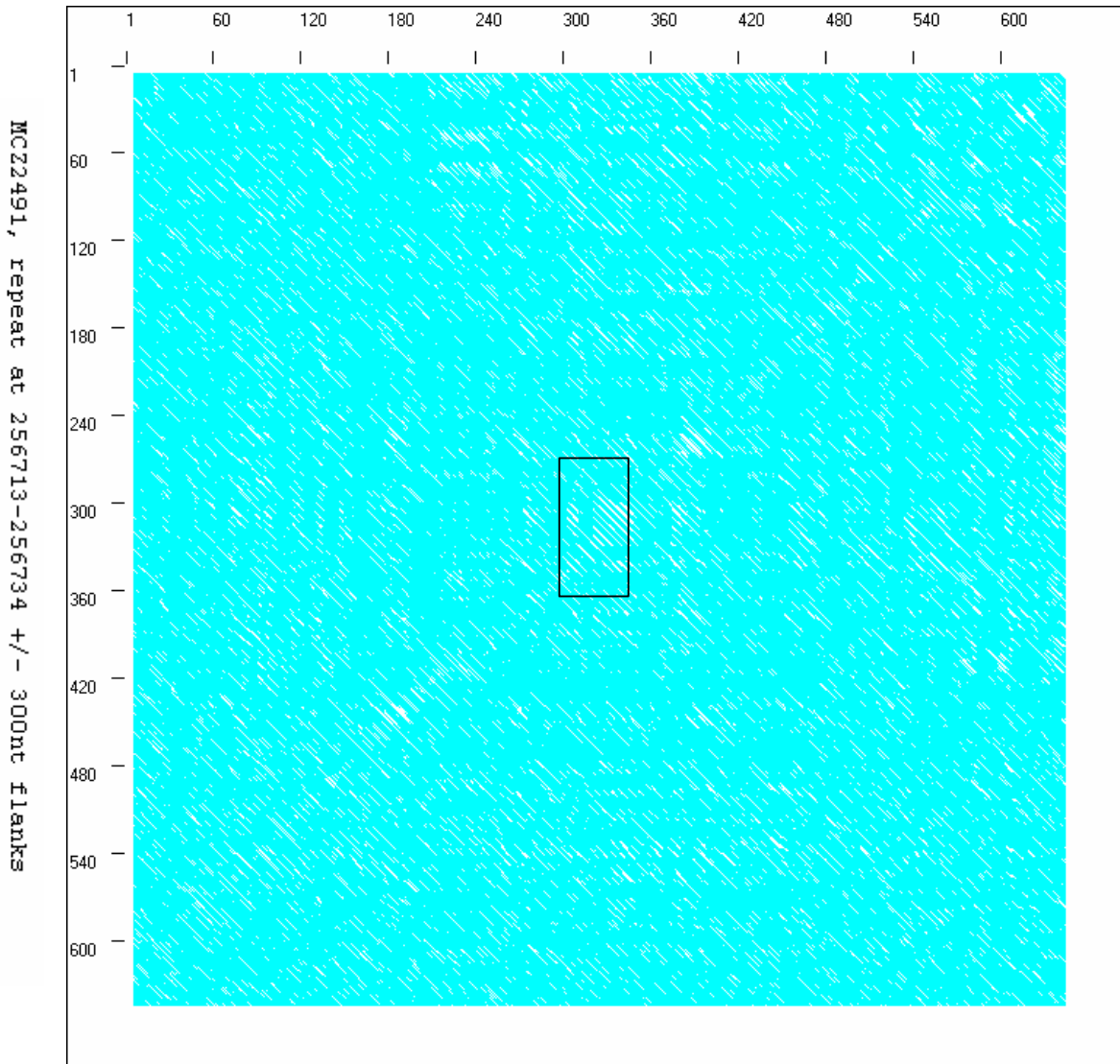
Denoeud: 1694228-1694275 1741705-1741676

MC58, repeat at 23260-23284 +/- 300nt flanks



VNTRfinder: 1694228-1694275 1741676-1741723

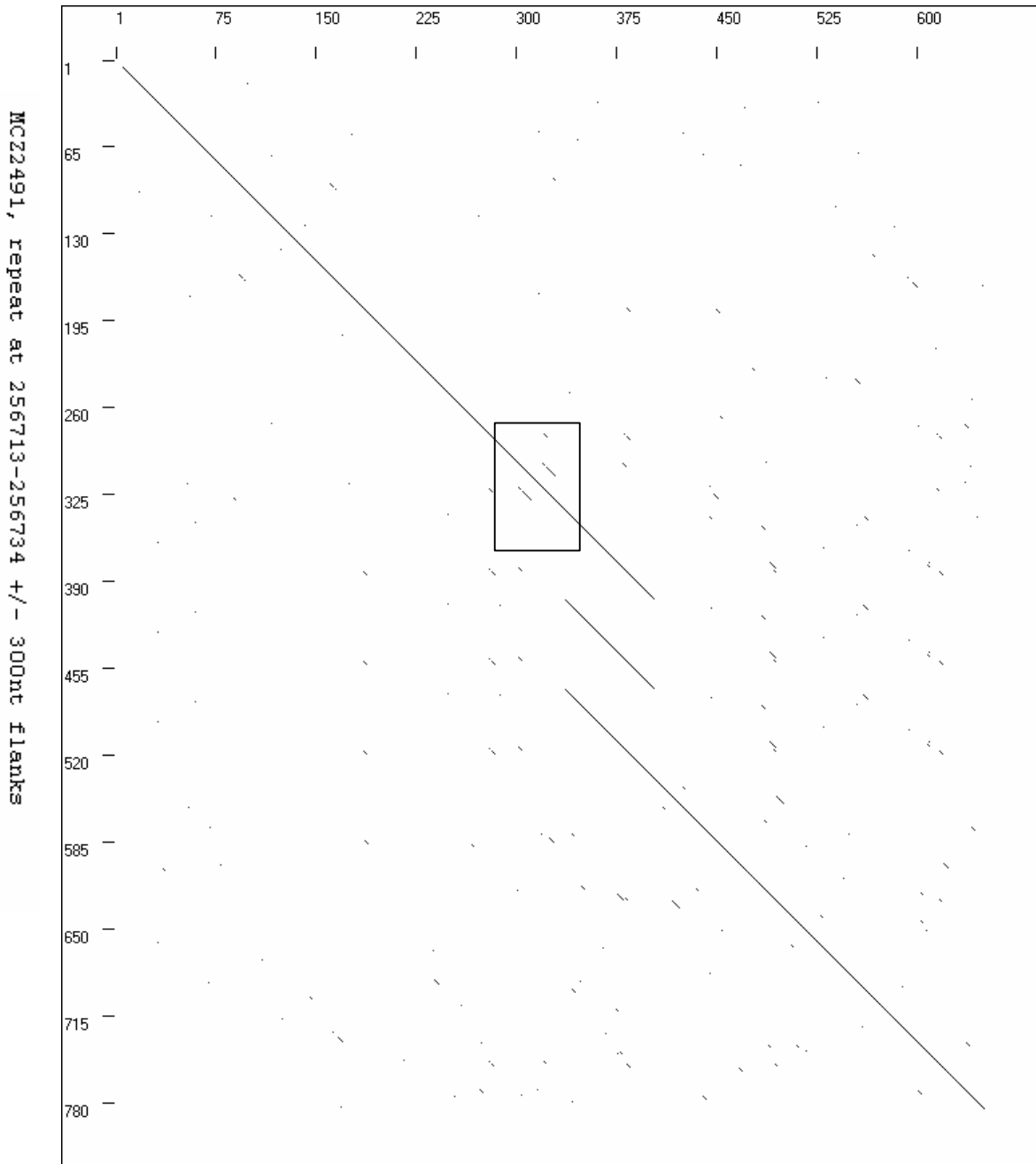
MC58, repeat at 23260-23284 +/- 300nt flanks



Repeat start-stop: 1822610-1822663
Unit: CCGCCGTCACATTCAGTGC
Tandem array:
CCGCCGTGACATTCATGCCCGCCGTCAGATTCAGTGCCTTTGCCGTC AATATTC A
Denoeud report variant of 134
VNTRfinder report variant of 0

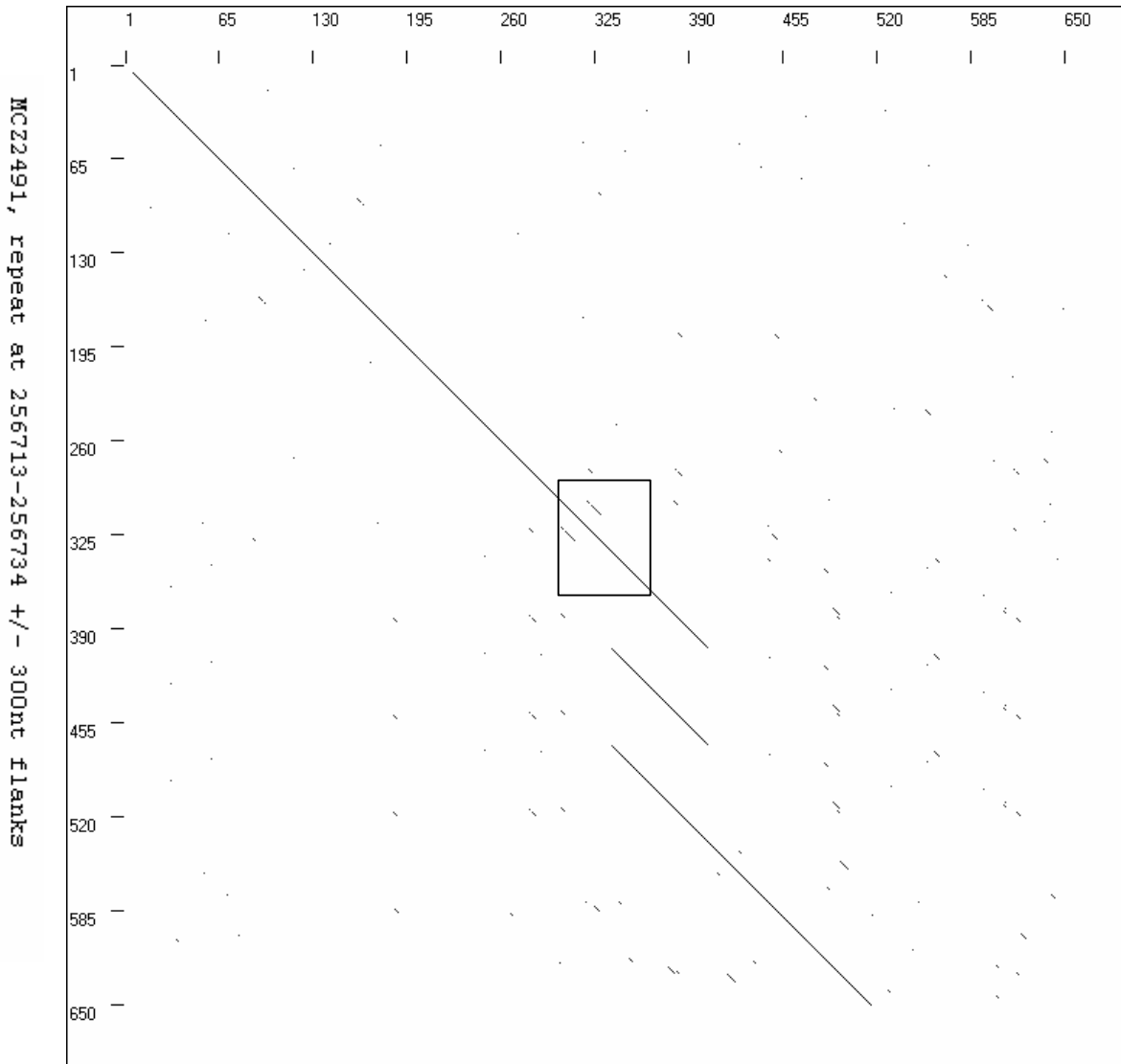
Denoeud: 1822610-1822663 1934569-1934756

MC58, repeat at 23260-23284 +/- 300nt flanks



VNTRfinder: 1822610-1822663 1934569-1934622

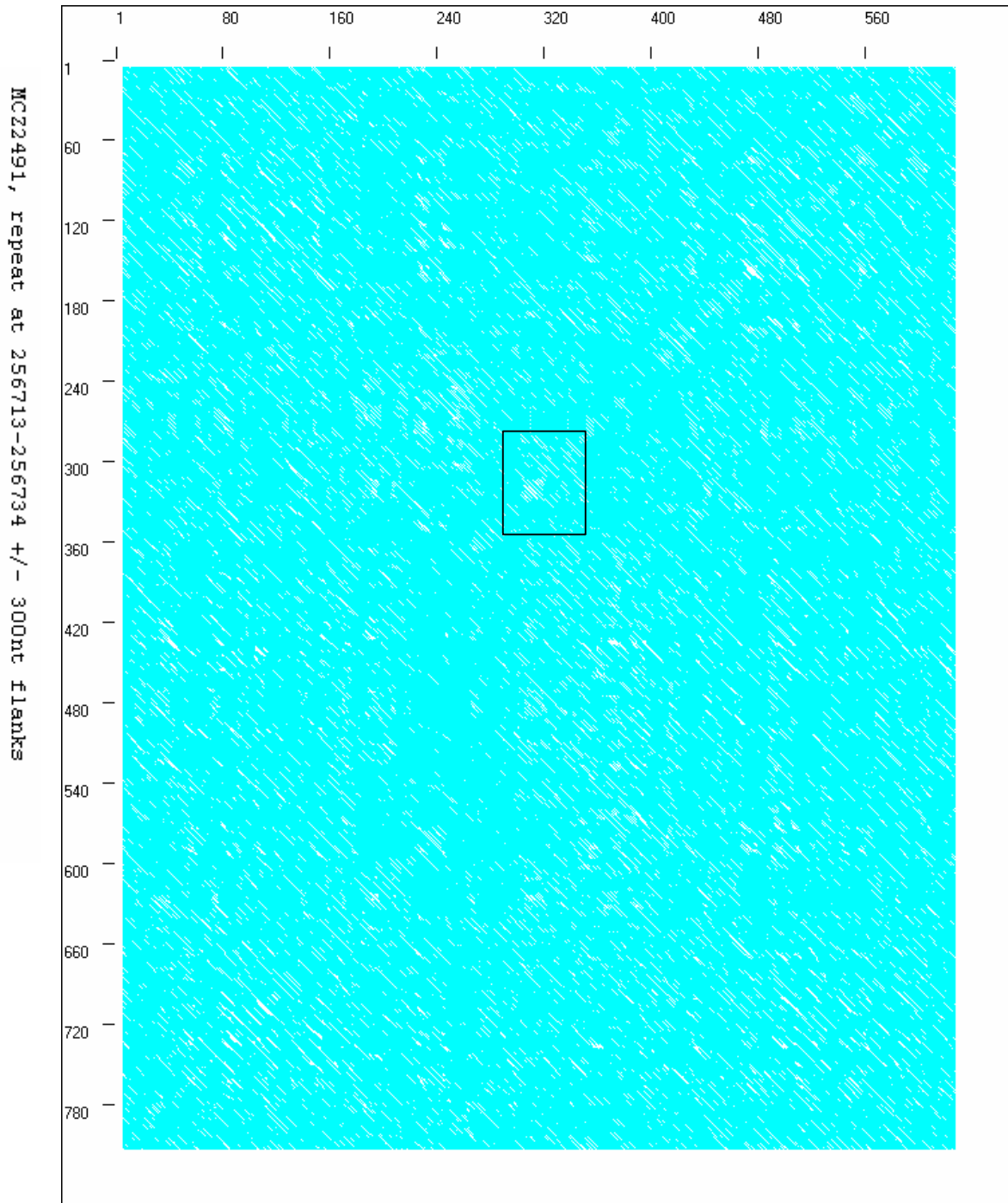
MC58, repeat at 23260-23284 +/- 300nt flanks



Repeat start-stop: 1975357-1975387
Unit: CTGCCTTCTG
Tandem array: CTGCCTTCTGCTGCCTTTCTCTGACCACTGC
Denoeud report variant of 186
VNTRfinder report variant of 0

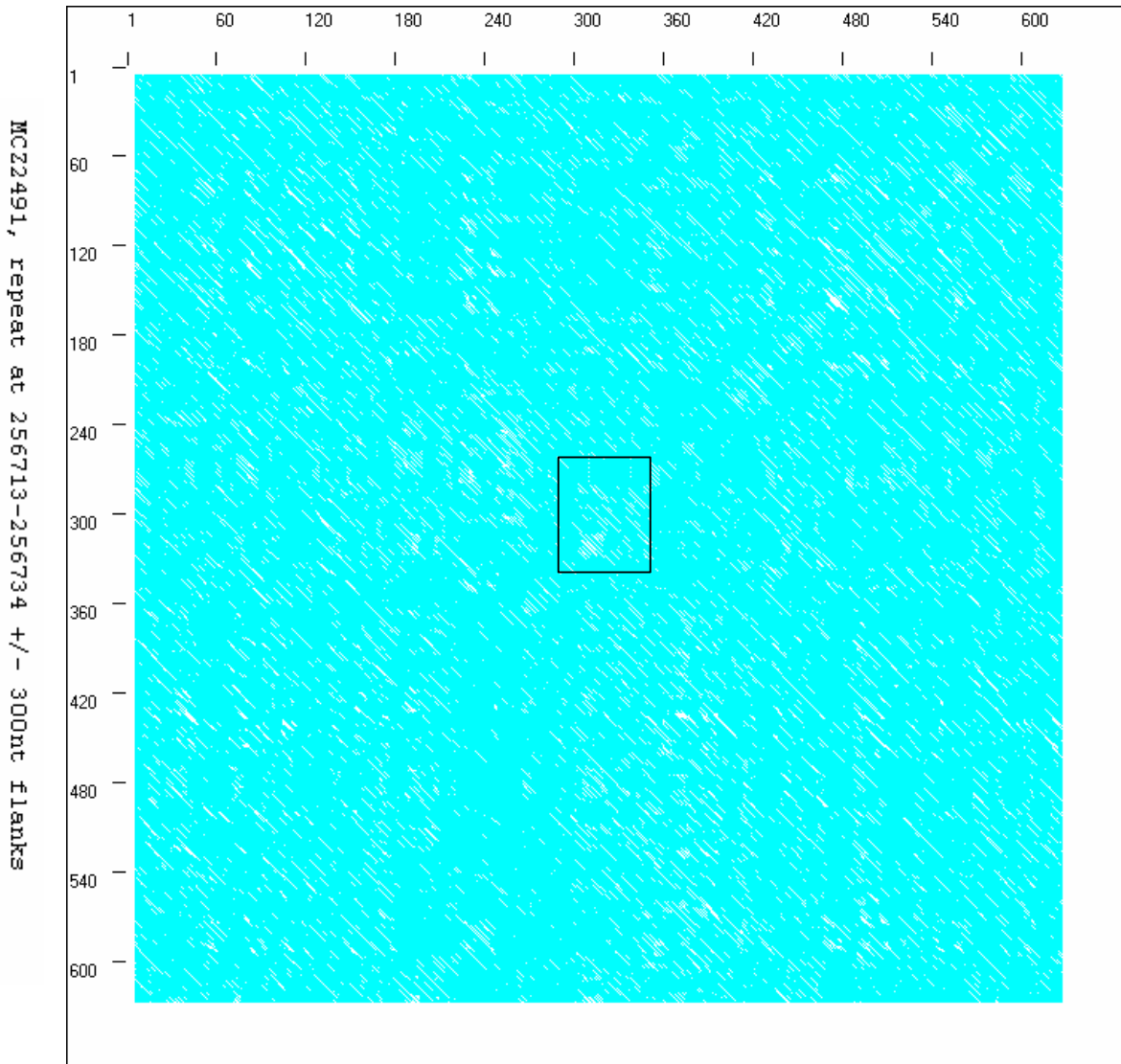
Denoeud: 1975357-1975387 558771-558555

MC58, repeat at 23260-23284 +/- 300nt flanks



VNTRfinder: 1975357-1975387 558555-558585

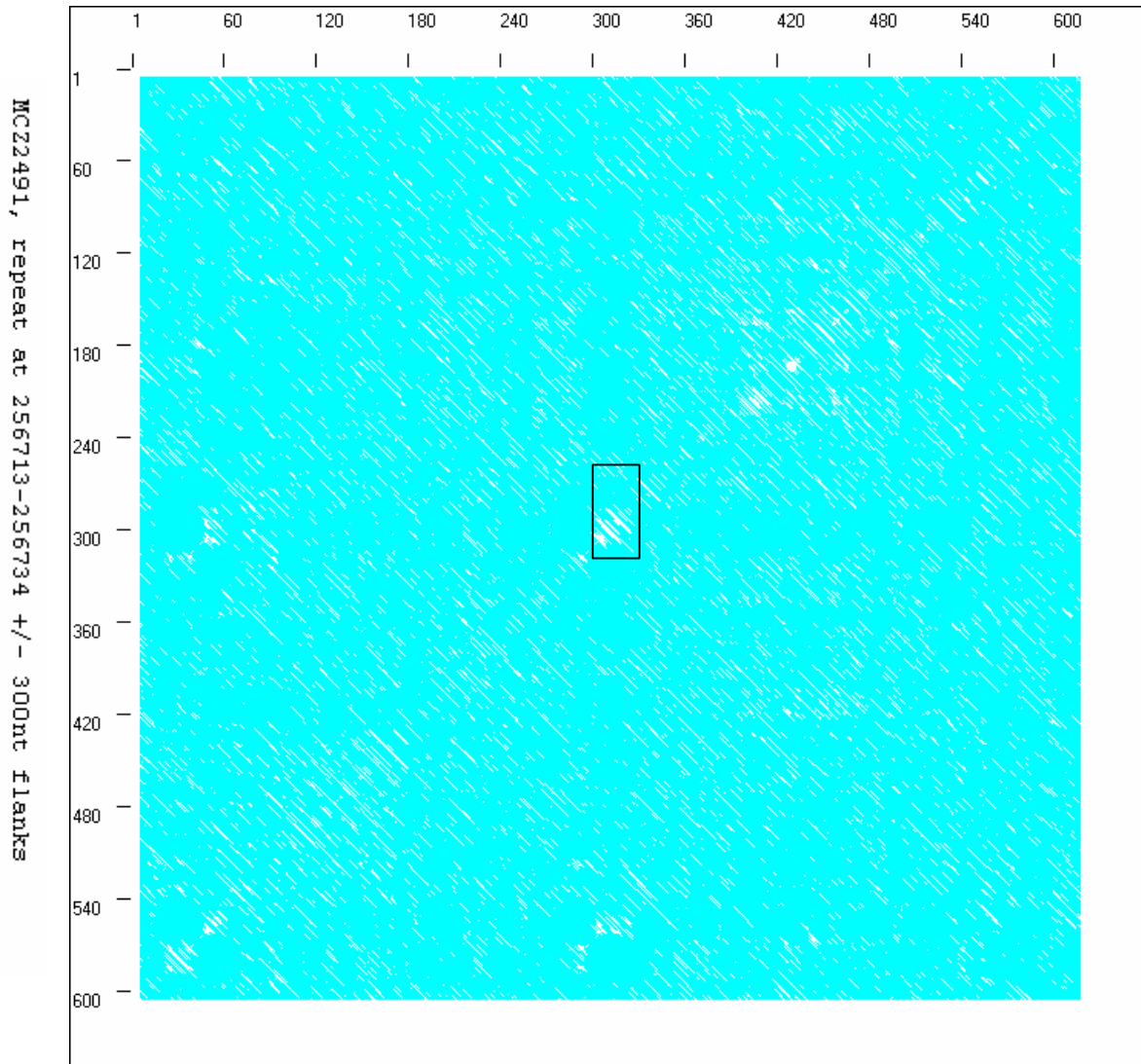
MC58, repeat at 23260-23284 +/- 300nt flanks



Repeat start-stop: 1985578-1985598
Unit: GGGAGA
Tandem array: GGGAGAGGGTTAGGGAGAGGG
Denoed report variant of 12
VNTRfinder report variant of 0

Deneoud: 1985578-1985598 547879-547871

MC58, repeat at 23260-23284 +/- 300nt flanks



VNTRfinder: 1985578-1985598 547859-547879

MC58, repeat at 23260-23284 +/- 300nt flanks

MC22491, repeat at 256713-256734 +/- 300nt flanks

