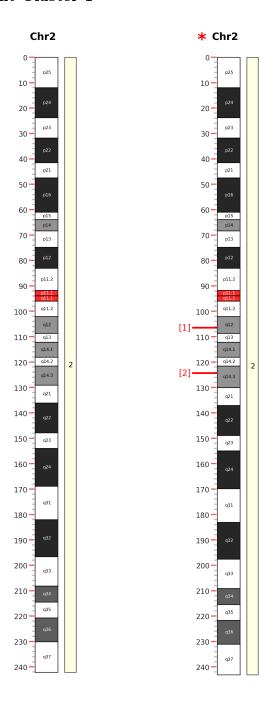
aketitlehookcmvspace-10ex

Parameters

- OMKar version: xxx
- Genome assembly: hg38
- Genes: protein coding
- Breakpoint Gene Reporting Proximity: 50
- Threshold for event insertion size: 200
- Threshold for event deletion size: 200
- Supported SV types:
 - Deletion
 - Inversion
 - Single/repeated Tandem-duplication
 - Left/right Duplication-inversion
 - 2/multi-break Reciprocal-balanced-translocation
 - Nonreciprocal-balanced-translocation
 - Duplicated-insertion

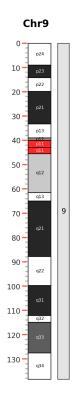
Event Cluster 1

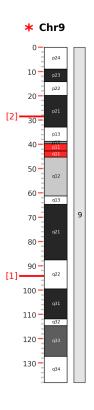


SVs

- 1. **inv(2)**(**q12.2q12.3**). inversion on Chr2: 106,462,406-107,833,526 (q12.2-q12.3)
- 2. $\mathbf{dup(2)(q14.3)}$. tandem duplication on Chr2: 124,318,296-125,307,772 (q14.3 q14.3)

Impacted genes in DDG2P

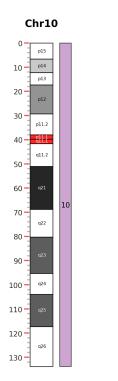


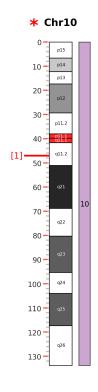


SVs

- 1. inv(9)(q22.32q22.33). inversion on Chr9: 94,438,791- 96,949,317(q22.32-q22.33)
- 2. **del(9)(p21.1)**. deletion on Chr9: 28,498,341-28,758,302 (p21.1-p21.1)

Impacted genes in DDG2P

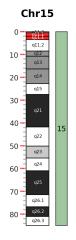


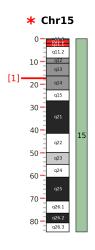


\mathbf{SVs}

1. inv(10)(q11.22). inversion on Chr10: 46,991,593-48,060,267(q11.22-q11.22)

Impacted genes in DDG2P



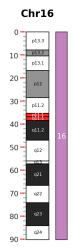


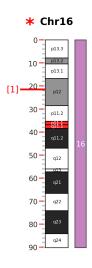
SVs

1. del(15)(q14). deletion on Chr15: 34,346,216-34,614,876 (q14-q14)

Impacted genes in DDG2P

SV	Rationale	Gene Name	Gene Omim
1	breakpoint proximal	NOP10	606471
1	breakpoint proximal	SLC12A6	604878
1	breakpoint proximal	OTUD7A	612024
1	CN-1	NOP10	606471
1	CN-1	${ m SLC12A6}$	604878

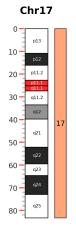


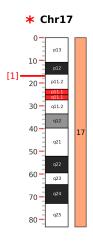


\mathbf{SVs}

1. **inv(16)(p12.2)**. inversion on Chr16: 21,502,978-22,436,123 (p12.2 - p12.2)

Impacted genes in DDG2P



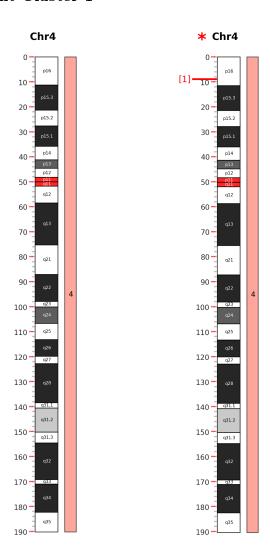


SVs

1. **inv(17)(p11.2)**. inversion on Chr17: 16,806,184-18,509,508 (p11.2-p11.2)

Impacted genes in DDG2P

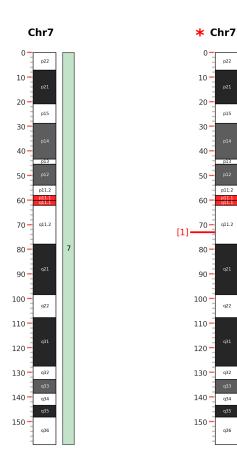
Event Cluster 1



SVs

1. $\mathbf{dup(4)(p16.1)}$. tandem duplication on Chr4: 8,929,610-9,144,574 (p16.1-p16.1)

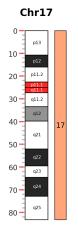
Impacted genes in DDG2P

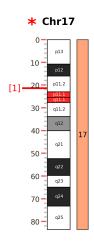


SVs

1. **inv(7)(q11.23)**. inversion on Chr7: 73,061,114-75,291,965 (q11.23 - q11.23)

Impacted genes in DDG2P

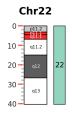


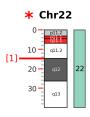


SVs

1. dup(17)(p11.2). tandem duplication on Chr17: 21,366,522-21,692,279 (p11.2-p11.2)

Impacted genes in DDG2P





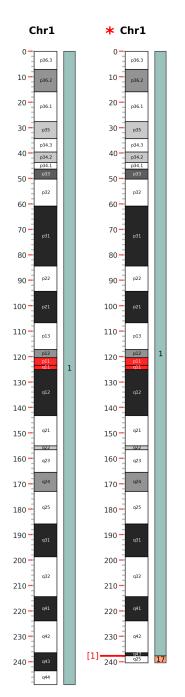
SVs

1. del(22)(q11.23q12.1). deletion on Chr22: 25,127,033-25,515,764 (q11.23 - q12.1)

Impacted genes in DDG2P

SV	Rationale	Gene Name	Gene Omim
1	CN-1	CRYBB2	123620
1	CN-1	CRYBB3	123630

Event Cluster 1

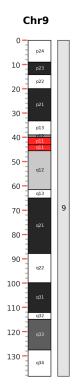


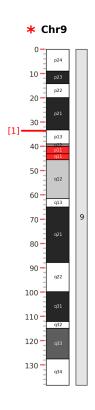


SVs

1. $\mathbf{t(1;17)(q43;q25.3)}$. balanced translocation between Chr1 and Chr17, between segments Chr1: 237,668,707-248,943,333 (q43-q44) and Chr17: 80,544,491-83,246,392 (q25.3-q25.3)

Impacted genes in DDG2P

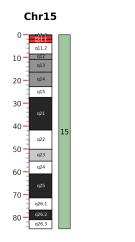


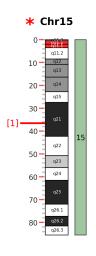


SVs

1. **inv(9)(p13.3p13.1)**. inversion on Chr9: 33,582,925-38,561,385 (p13.3-p13.1)

Impacted genes in DDG2P





SVs

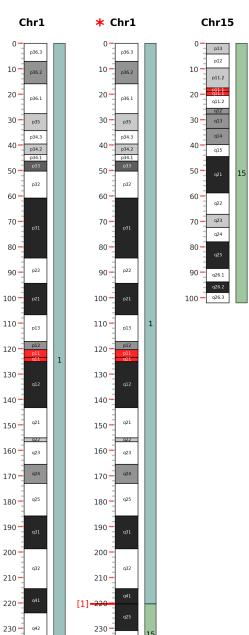
1. $\mathbf{dup(15)(q21.3)}$. tandem duplication on Chr15: 53,582,371-54,147,634 (q21.3 - q21.3)

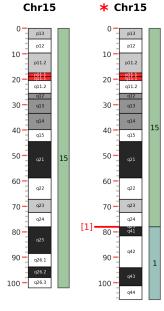
Impacted genes in DDG2P

SV	Rationale	Gene Name	Gene Omim
1	breakpoint proximal	HERC2	605837

Event Cluster 1

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SVs

t(1;15)(q41;q25.1). balanced translocation between Chr1 and Chr15, between segments Chr1: 220,322,626-248,943,333 (q41-q44) and Chr15: 78,010,675-101,976,509 (q25.1-q26.3)

Impacted genes in DDG2P