Class I:
Centriole Duplication Defects
**Localization not Tested**
Reference:
**Ana1 CG6631**

**a**

**b**

Cnn DSas-4 DNA  Cnn  DSas-4  Hoechst  αTub  Cnn αTub DNA

**c**

DSpd-2 γTub DNA  γTub  DSpd-2  Cnn  DSpd-2 Cnn DNA

**d**

GFP DSas-4 DNA  GFP  DSas-4  αTub  GFP αTub DNA

**e**

Number of DSas-4 dots

- Control
- Ana1

% of Mitotic Cells

- Control
- Ana1

Number of Cnn dots

- Control
- Ana1

% of Mitotic Cells
**emb CG13387**

(a) Image showing fluorescently labeled cells with various markers.

(b) Images of cells stained with different dyes: Cnn DSas-4 DNA, Cnn, DSas-4, Hoechst, αTub, Cnn αTub DNA.

(c) Images of cells stained with dspsd-2, γTub, DSpsd-2, Cnn, and DSpsd-2 Cnn DNA.

(d) Images of cells stained with GFP, DSas-4 DNA, GFP, DSas-4, αTub, and GFP αTub DNA.

(e) Graph showing the percentage of mitotic cells with different numbers of DSas-4 dots.

(f) Graph showing the percentage of mitotic cells with different numbers of Cnn dots.
**a**

**b**

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<tr>
<th>Cnn DSas-4 DNA</th>
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<th>DSas-4</th>
<th>Hoechst</th>
<th>α Tub</th>
<th>Cnn α Tub DNA</th>
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**c**

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</table>

**e**

Percentage of Mitotic Cells

- **Control**
- **DSas-4**

Number of DSas-4 dots

- 0
- 1
- 2
- 3
- 4
- 5
- >5

Number of Cnn dots

- 0
- 1
- 2
- 3
- 4
- 5
- >5
Class II:
Centriole Duplication and PCM Maturation Defects
**DCep97**

**CG3980**

**a**

![Image of fluorescent microscopy of Drosophila cells showing expression of DSas-4 and Cnn proteins.](image)

**b**

![Image of fluorescent microscopy of Drosophila cells showing expression of DSas-4 and Cnn proteins.](image)

**c**

![Image of fluorescent microscopy of Drosophila cells showing expression of DSas-4 and Cnn proteins.](image)

**d**

![Image of fluorescent microscopy of Drosophila cells showing expression of DSas-4 and Cnn proteins.](image)

**e**

![Graph showing the percentage of mitotic cells based on the number of DSas-4 dots.](image)

**f**

![Graph showing the percentage of mitotic cells based on the number of Cnn dots.](image)
Rcd4  CG17295

(a) Image of stained cells showing localization of proteins

(b) Fluorescence microscopy images showing the distribution of different protein markers

(c) Graph showing the percentage of mitotic cells with varying numbers of DSas-4 dots

(d) Graph showing the percentage of mitotic cells with varying numbers of Cnn dots

(e) Graph comparing the distribution of DSas-4 dots between control and CG17295 conditions

Legend:
- Cnn: Green fluorescence
- DSas-4: Red fluorescence
- αTub: Blue fluorescence
- DNA: Yellow fluorescence
- GFP: Orange fluorescence
Localization D-Spd2 and \( \gamma \) Tubulin not Tested
Localization not Tested

% of Mitotic Cells

Number of Cnn dots

Control

Cam

% of Mitotic Cells

Number of DSas-4 dots

Control

Cam
Class III:
PCM Maturation Defects
**DSpd-2 CG17286**

(a) Image showing fluorescence microscopy of a sample. Scale bar indicates measurement.

(b) Series of images showing different cell stages stained with various markers: Cnn, DSas-4, DNA, Hoechst, αTub, and Cnn αTub DNA.

(c) close-ups of specific regions stained with DSpd-2 γTub DNA, γTub, DSpd-2, Cnn, and DSpd-2 Cnn DNA.

(d) close-ups of specific regions stained with DSpd-2 Cnn DNA, DSpd-2, Cnn, and Hoechst.

(e) Graphs showing percentage of mitotic cells at different number of DSas-4 and Cnn dots, compared to control and DSpd-2 conditions.
Map205  CG1483

(a) [Image of fluorescence microscopy images showing Map205 and CG1483 localization]

(b) [Image showing the localization of Cnn, DSas-4, αTub, Hoechst, and Cnn αTub DNA in control and Map205 conditions]

(c) [Image showing the localization of γTub, DSpd-2, Cnn, and DSpd-2 Cnn DNA in control and Map205 conditions]

(d) [Image showing the localization of GFP, DSas-4, αTub, and GFP αTub DNA in control and Map205 conditions]

(e) [Graph showing the percentage of mitotic cells with different numbers of DSas-4 dots in control and Map205 conditions, and similarly for Cnn dots]
**a** TEM image of γTub23C CG3157. Scale bar: 5 μm.

**b** Immunofluorescence images showing γTub23C CG3157. Cnn, DSas-4, Hoechst, αTub, Cnn αTub DNA.

**c** Immunofluorescence images showing DSpd-2 γTub, γTub, DSpd-2, Cnn, DSpd-2 Cnn DNA.

**d** Immunofluorescence images showing GFP DSas-4 DNA, GFP, DSas-4, αTub, GFP αTub DNA.

**e** Graphs showing % of mitotic cells with number of DSas-4 dots and number of Cnn dots for Control and gtub23C.

- **Controls:** 27% of mitotic cells with 4-5 DSas-4 dots, 25% with >5 dots.
- **gtub23C:** 27% of mitotic cells with 4-5 DSas-4 dots, 25% with >5 dots.
PP2A-29B CG17291

a

Not in Original Screen

b

control

PP2A-29B

Cnn DSas-4 DNA

Cnn

DSas-4

Hoechst

αTub

Cnn αTub DNA

c

DSpd-2 γTub DNA

γTub

DSpd-2

Cnn

DSpd-2 Cnn DNA

d

Localization not Tested

GFP DSas-4 DNA

GFP

DSas-4

αTub

GFP αTub DNA

e

% of Mitotic Cells

0 1 2 3 4 5 >5

Number of DSas-4 dots

0 25 50 75

% of Mitotic Cells

0 1 2 3 4 5 >5

Number of Cnn dots

0 25 50 75

% of Mitotic Cells

0 1 2 3 4 5 >5

Number of Cnn dots
Class IV: Centrosome Separation Defects
Figure a shows immunofluorescence images of CG6620 cells stained for different proteins. Figure b presents a series of images indicating the localization of various proteins and DNA markers. Figure c illustrates the distribution of proteins and DNA in different regions of the cells. Figure d displays images stained with an antibody specific to a particular protein and its interaction with DNA. Figure e depicts bar graphs showing the percentage of mitotic cells based on the number of dots for DSas-4 and Cnn proteins.