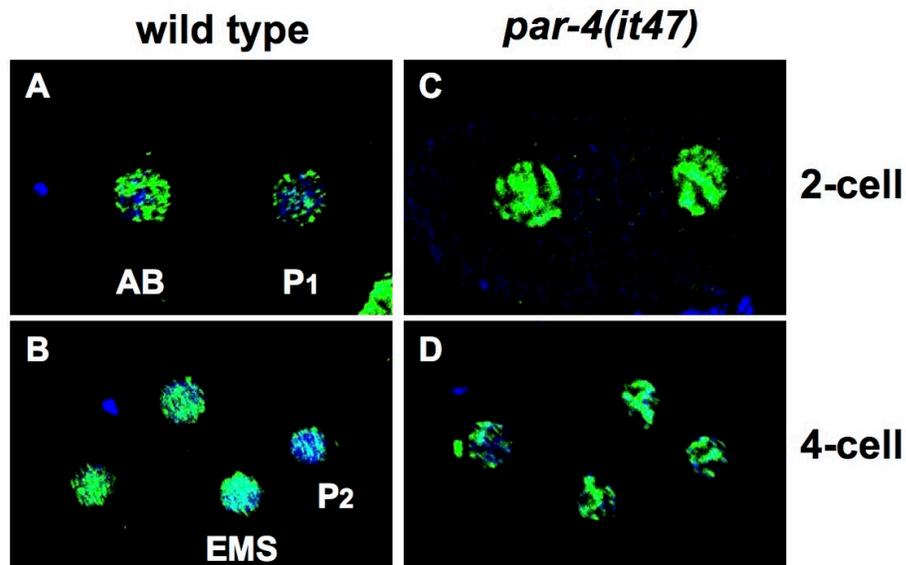


## Asymmetric distribution of *cyb-3* in 4-cell stage embryos

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### Description:

Early embryos were fixed and stained with Mab F2F4 (green), shown to recognize [CYB-3](#) (Michael, 2016), and DAPI, to illuminate the DNA (blue). Either wild type or *par-4* mutant embryos were examined, after 24-hour incubation at 25C (the non-permissive temperature for the *it47* allele of *par-4*). Anterior is to the left in all images. The data presented here reveals previously not shown data that depicts [CYB-3](#) as asymmetrically distributed at the [4-cell stage](#). These data further support reported findings in Michael, 2016. There is more [CYB-3](#) in the [AB](#) cell relative to its sister [P1](#). In [4-cell embryos](#) there is more [CYB-3](#) in the [EMS](#) cell relative to its sister, [P2](#). Thus, during P-lineage divisions, [CYB-3](#) is asymmetrically distributed such that the somatic precursor receives more than its germline precursor sister cell. This asymmetry is abolished in *par-4* mutant embryos, where all blastomeres contain equivalent amounts of [CYB-3](#).

### References

Michael WM. Cyclin CYB-3 controls both S-phase and mitosis and is asymmetrically distributed in the early *C. elegans* embryo. *Development*. 2016 Sep 1;143(17):3119-27. doi: 10.1242/dev.141226. PubMed PMID: 27578178; PubMed Central PMCID: PMC5047676.

### Reagents

Antibody: Mab F2F4

Strain: [KK184 par-4\(it47ts\)](#) V

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