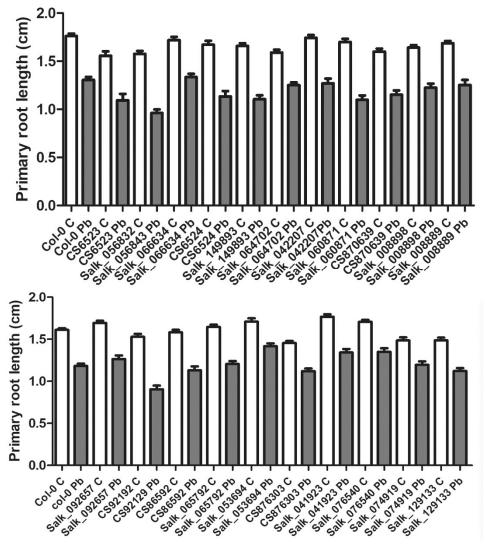
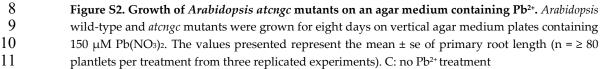
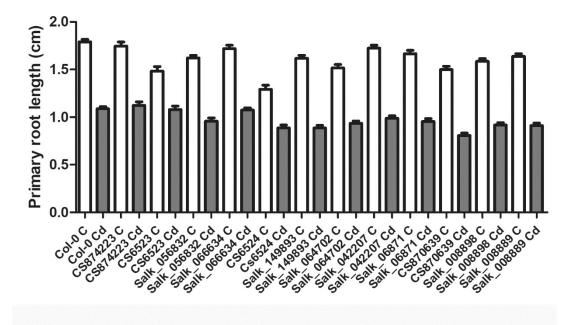


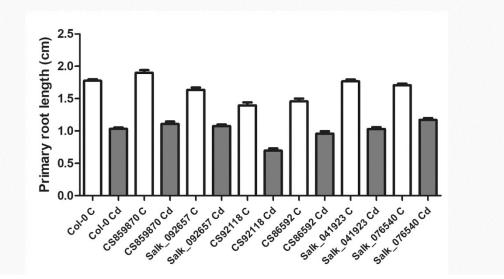
**Figure S1. Genotyping of the T-DNA inserted** *AtCNGC* **mutants.** Genomic DNAs were prepared with rosette leaf-tissues of *Arabidopsis* wild-type (Col-0, C) and *atcngc* mutants (numbered). Genotyping PCR assays were performed using the genomic DNAs with sequence-specific primers (LP and RP) and LB1.3 (LB) primers that were provided in Salk Institute Genomic Analysis Laboratory (http://signal.salk.edu/tdnaprimers.2.html).

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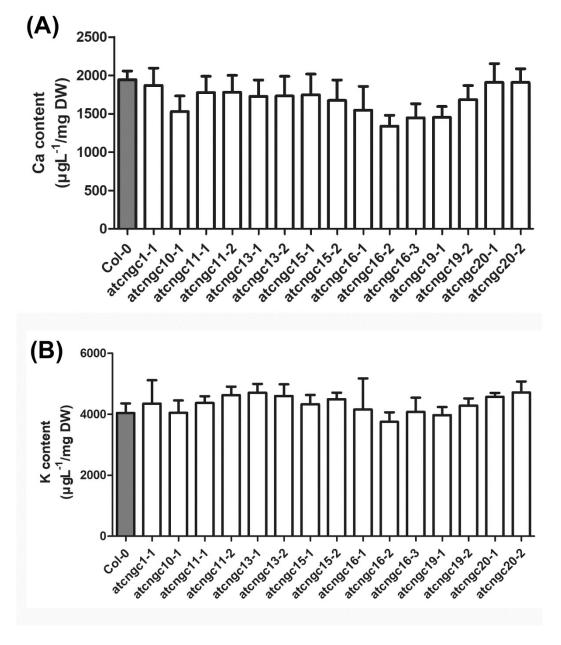






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13Figure S3. Growth of Arabidopsis atcngc mutants on an agar medium containing Cd2+. Arabidopsis14wild-type (Col-0) and atcngc mutants were grown for eight days on vertical agar medium plates15containing 55  $\mu$ M CdCl2.2.5H2O. The values presented represent the mean ± se of primary root length16(n = ≥ 80 plantlets per treatment from three replicated experiments). C: no Cd2+ treatment



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18Figure S4.  $Ca^{2+}$  and  $K^+$  content in the *Arabidopsis* wild-type and *atcngc* mutants. Eight-day-old19plantlets grown on media without heavy metal ions were collected from individuals from three20replicated experiments and extracted in 60% (v/v) HNO3. Elemental analysis was conducted with an21ICP-MS System. Data presented represent the mean  $\pm$  se (n = 3).