

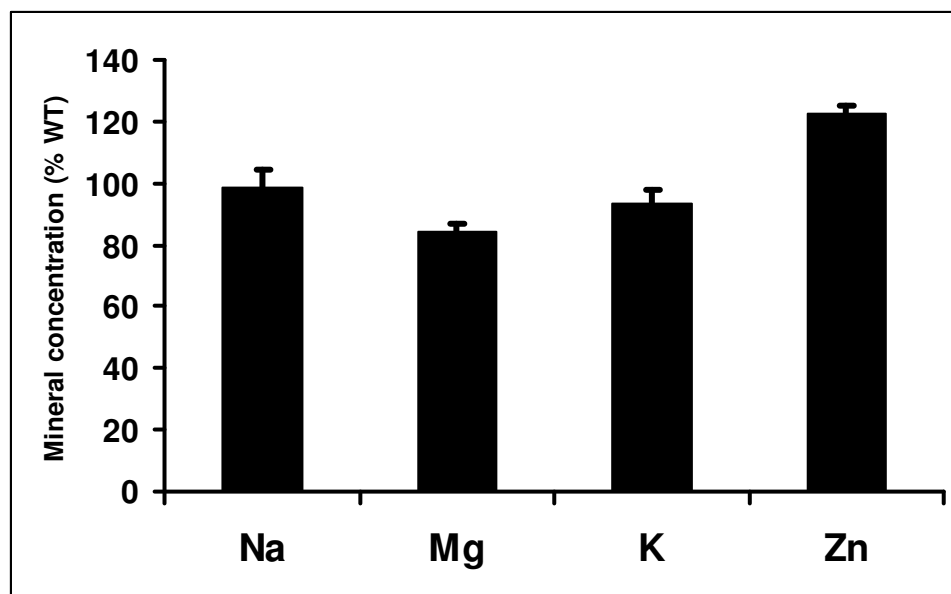


FIGURE S1. Effect of the *vnx1* mutation on sodium, magnesium, potassium and zinc accumulation. WT (W303) and *vnx1* mutant yeast strains were grown in mineral-supplemented YPD medium (as described in material and methods) containing an additional 10 mM CaCl_2 . Elemental content was determined using ICP-MS, and mutant values were normalized to WT values for each element. Data represent the means ($\pm$ SE) from three independent experiments.

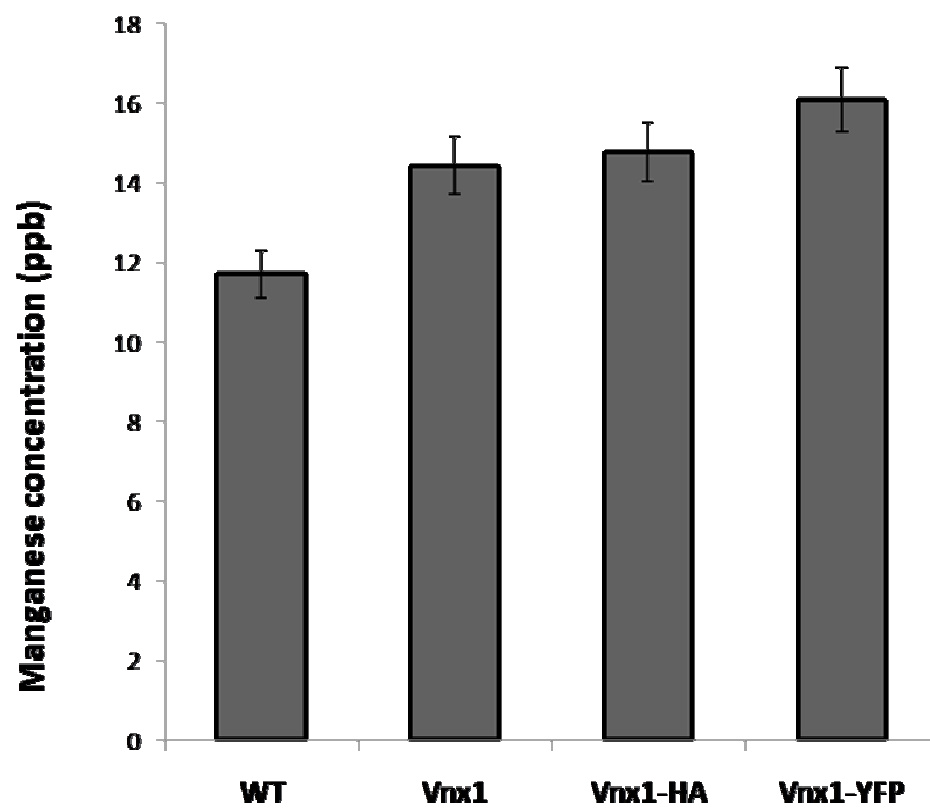


FIGURE S2: Manganese content of yeast cells expressing Vnx1 and Vnx1-HA and Vnx1-YFP.

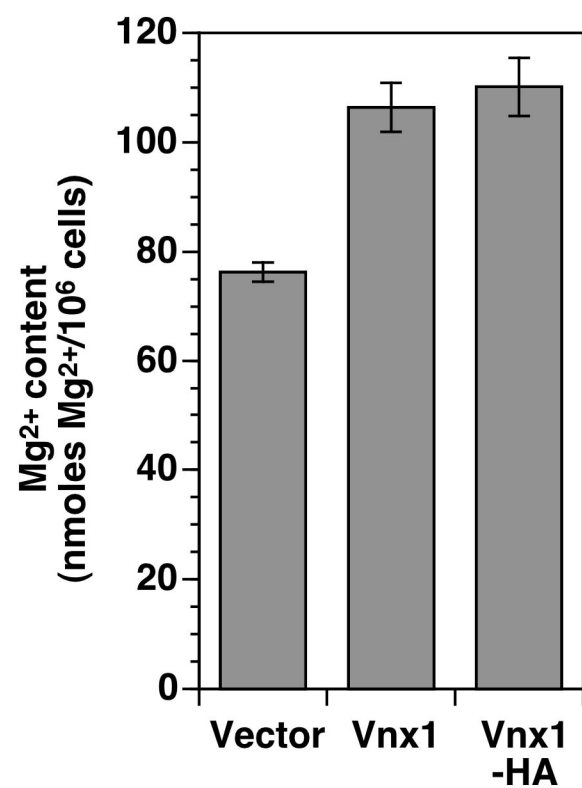


FIGURE S3: Magnesium content of yeast cells expressing Vnx1 and Vnx1-HA in WT background

The GenBank accession numbers with sequences used to generate phylogenetic tree.

BLAST against Vnx1 performed on April 15, 2010

Reference sequence

1: DAA10241 (Vnx1)

Type II CAX entries from all organisms excluding Ascomycetes

3: XP_569752 (Cryptococcus neoformans var. neoformans JEC21)

4: XP_001875805 (Laccaria bicolor S238N-H82)

5: XP_001835884 (Coprinopsis cinerea okayama7#130)

6: XP_001729272.1 (Malassezia globosa CBS 7966)

7: NP_001020678 (Danio rerio)

8: EFA85329 (Polysphondylium pallidum PN500)

9: XP_641781 (Dictyostelium discoideum AX4)

10: XP_002670488 (Naegleria gruberi)

11: EFA84482 (Polysphondylium pallidum PN500)

12: XP_687025 (Danio rerio)

13: NP_001089400 (Xenopus laevis)

14: XP_760473 (Ustilago maydis 521)

15: XP_002677648 (Naegleria gruberi)

16: XP_687025 (Danio rerio)

17: XP_787831 (Strongylocentrotus purpuratus)

18: XP_001582908 (*Trichomonas vaginalis* G3)

19: XP_001306407 (*Trichomonas vaginalis* G3)

20: XP_002613765 (*Branchiostoma floridae*)

Selected Type II CAX entries from Ascomycetes

2: XP_456934 (*Debaryomyces hansenii* CBS767)

21: XP_002495797 (*Zygosaccharomyces rouxii*)

22: XP_449527 (*Candida glabrata* CBS138)

23: XP_001643168 (*Vanderwaltozyma polyspora* DSM 70294)

24: XP_001644062 (*Vanderwaltozyma polyspora* DSM 70294)

25: T49399 (*Neurospora crassa*)

26: EEU34197 (*Nectria haematococca* mpVI 77-13-4)

27: NP_593099 (*Schizosaccharomyces pombe*)

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