

cax-RIP, his-3 (allele cax-10B-13)

cax encodes a calcium transport protein in the vacuolar membrane. Characterization of the gene and mutant strain has been done by Emilio Margolles-Clark and Barry Bowman, but has not yet been published.

An abstract is available:

Margolles-Clark, E, S. Abreu, and B. Bowman (1999) Characterization of a vacuolar Ca²⁺/H⁺ exchanger (CAX) of *Neurospora crassa*. *Fungal Genet. Newsl.* 46 (Suppl.) 137

The mutant strain grows like the wild type and has no easily scorable phenotype. Vacuolar membranes isolated from cax-RIP are nearly completely deficient in ATP-driven calcium transport. Verification of the mutant strain is best done by using PCR to amplify the cax gene. Digestion with the NlaIII restriction endonuclease will yield different fragments than in the wild type 74A. The DNA sequence has been deposited in Genbank (AF053229)