SSU1 encodes a plasma membrane sulfite pump involved in sulfite metabolismand required for efficient sulfite efflux. Ssu1p lacks the nucleotide binding sequence typical of ABC transporters, but resembles the general structure of facilitator/transporter proteins. Ssu1p is a member of the major facilitator superfamily involved in efflux of toxic compounds, specifically mediating efflux of the free form of sulfite. Ssu1p has no yeast homologs and is the sole identified target of the Fzf1p transcriptional activator. Mutations in SSU1 cause sulfite sensitivity. Overexpression confers heightened sulfite resistanceand suppresses sensitivity of unrelated sulfite mutants, indicating that sulfite efflux mediated by Ssu1p is a major detoxification pathway.