BLM3 was identified genetically in a large screen looking for mutations conferring hypersensitivity to the drug bleomycin and radiation. The ORF YFL007W was cloned as a multicopy suppressor of the codominant blm3-1 mutation. Complete deletions of the YFL007W ORF indicated that cells are hypersensitive to bleomycin and viable in the absence of the drug. Subsequent resequencing of the region around YFL007W indicated the presence of an additional G, resulting in the original YFL006W ORF being merged into YFL007W. Genetic mapping and sequencing of the expanded YFL007W ORF in the blm3-1 mutant indicated that YFL007W was an extragenic suppressor of the blm3-1 mutation. Thus, YFL007W was renamed BLM10. The gene corresponding to the original blm3-1 mutation was later identified as UBP3.