



## Predicting Genes in the *Dictyostelium discoideum* and the *Dictyostelium purpureum* Genomes

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COOK 31 18 A&B

### ABSTRACT:

The recent sequence and assembly of the *Dictyostelium discoideum* genome has made it possible to scan the entire genome with gene prediction software. We have chosen to use the Geneid software package along with a new parameter file created using the human curated *Dictyostelium discoideum* gene models. The new parameter file was based on nearly 2800 human reviewed gene models, whereas the initial gene prediction on the *Dictyostelium discoideum* genome relied on a parameter set generated using a distantly related species. Out of 13644 re-predictions, 671 were new, 10042 were identical and 2951 differed either by start site, end site, or exon structure. We have also utilized the *Dictyostelium discoideum* parameter file to predict 14,097 genes within the *Dictyostelium purpureum* genome.

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