

UNRAVELING MIRTRONS KNOWLEDGE WITH DATA MINING AND BIOINFORMATICS METHODS

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Abstract

In the current literature, there was no repository centralizing and organizing the mirtrons data available to the public. To fill this gap, we developed mirtronDB, the first knowledge database dedicated to mirtrons, and it is available at <http://mirtrondb.cp.utfpr.edu.br/>. MirtronDB currently contains a total of 1,407 precursors and 2,426 mature sequences in 18 species (chordates, invertebrates, and plants). Our bioinformatics and data mining analysis highlighted that most studies on mirtrons were focused on *H. sapiens* and *M. musculus*. Consequently, we identified more similarity results among chordates than in the other groups. This study provides initial mirtron characterization and can be used as a guide about mirtrons research.

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