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Céline Bourdon, Philippe Bardou, Etienne Aujean, Sandrine Le Guillou,
Fabienne Le Provost, Gwenola Tosser-Klopp

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RumimiR: a detailed microRNA database focused on ruminant species

Bourdon Céline¹, Bardou Philippe^{2, 3}, Aujean Etienne¹, Le Guillou Sandrine¹, Tosser-Klopp Gwenola² [¶],
Le Provost Fabienne^{1*} [¶]

¹ GABI, INRA, AgroParisTech, Université Paris-Saclay, Jouy-en-Josas, France

² GenPhySE, Université de Toulouse, INRA, ENVT, Castanet-Tolosan, France

³ Sigenae, INRA, Castanet-Tolosan, France

In recent years, the increasing use of Next Generation Sequencing technologies to explore the genome has generated large quantities of data. For microRNAs, more and more publications have described several thousand sequences, all species included. In order to obtain a detailed description of microRNAs from the literature for three ruminant species (bovine, caprine and ovine), a new database has been created: RumimiR. To date, 2,887, 2,733 and 5,095 unique microRNAs of bovine, caprine and ovine species, respectively, have been included. In addition to the most recent reference genomic position and sequence of each microRNA, this database contains details on the animals, tissue origins and experimental conditions available from the publications. Identity with human or mouse microRNA is mentioned. The RumimiR database enables data filtering, the selection of microRNAs being based on defined criteria such as animal status or tissue origin. For ruminant studies, RumimiR supplements the widely used miRBase database by browsing and filtering using complementary criteria, and the integration of all published sequences described as novel. The principal goal of this database is to provide easy access to all ruminant microRNAs described in the literature.