

# LncRNA *JHDM1D-AS1* Is a Key Biomarker for Progression and Modulation of Gemcitabine Sensitivity in Bladder Cancer Cells

Isadora Oliveira Ansaloni Pereira <sup>1,†</sup>, Glenda Nicioli da Silva <sup>1,\*†</sup>, Tamires Cunha Almeida <sup>2</sup>, Ana Paula Braga Lima <sup>1</sup>, André Luiz Ventura Sávio <sup>3,4</sup>, Katia Ramos Moreira Leite <sup>5</sup> and Daisy Maria Fávero Salvadori <sup>6</sup>

<sup>1</sup> Departamento de Análises Clínicas, Pharmacy School, UFOP—Federal University of Ouro Preto, Ouro Preto 35400-000, MG, Brazil

<sup>2</sup> Laboratory of Pain and Signaling, Butantan Institute, São Paulo 05503-900, SP, Brazil

<sup>3</sup> Departamento de Odontologia, Faculdade do Centro Oeste Paulista—FACOP, Piratininga 17490-000, SP, Brazil

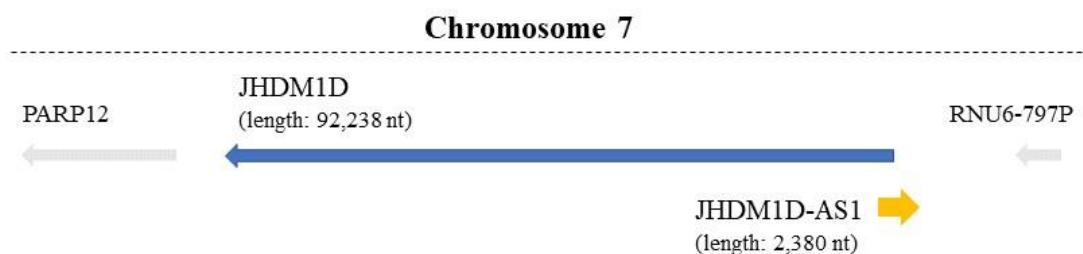
<sup>4</sup> Departamento de Ciências Médicas, Universidade do Oeste Paulista—UNOESTE, Jaú 19050-900, SP, Brazil

<sup>5</sup> Departamento de Cirurgia, Medical School, USP—University of São Paulo, São Paulo 05508-060, SP, Brazil

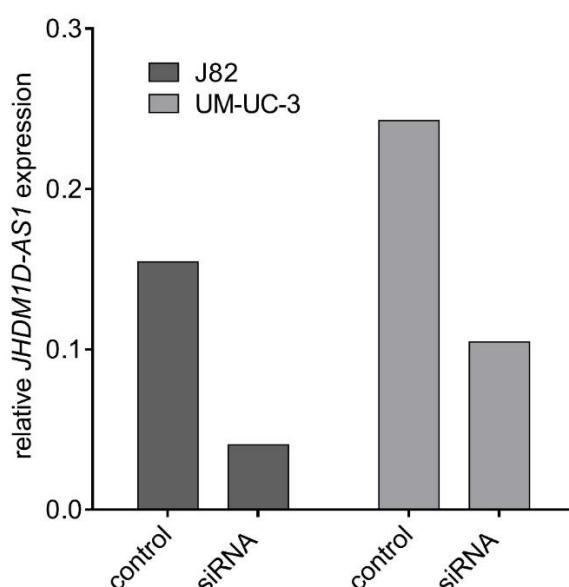
<sup>6</sup> Departamento de Patologia, Medical School, UNESP—São Paulo State University, Botucatu 01151-000, SP, Brazil

\* Correspondence: nicioli@ufop.edu.br

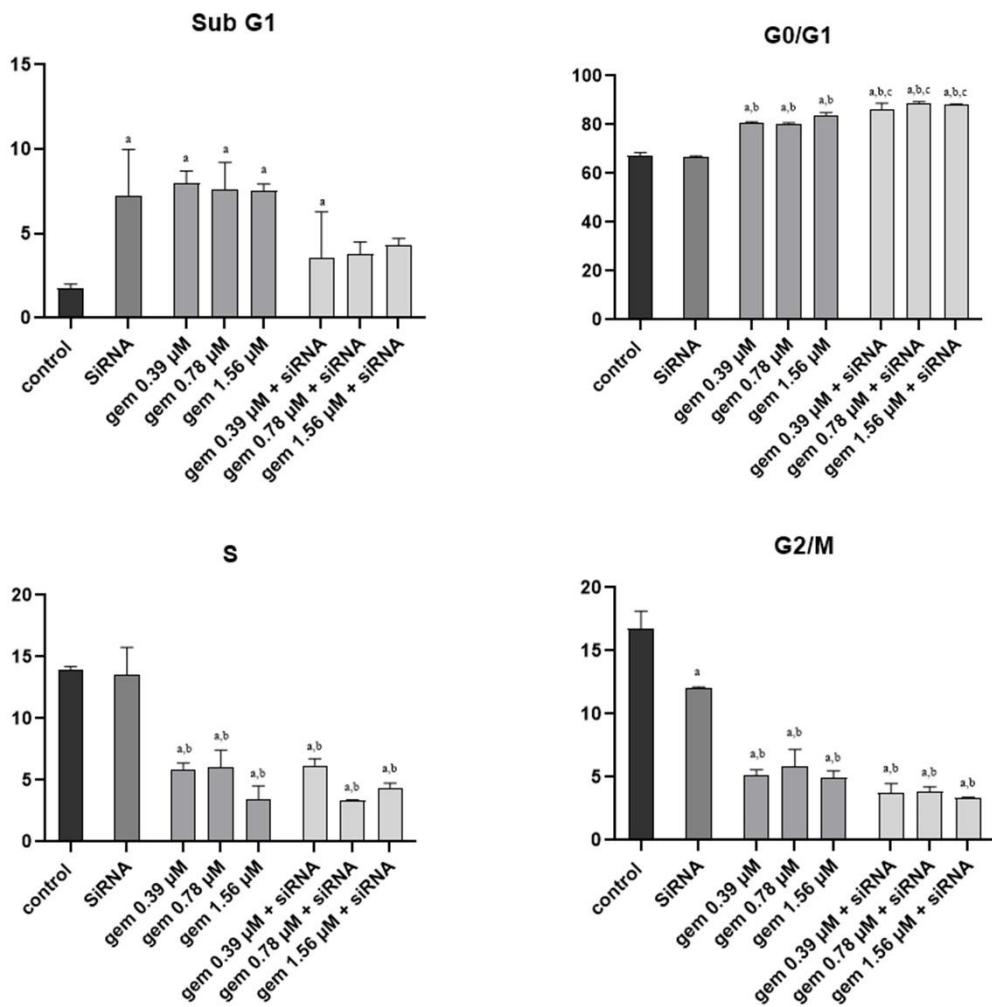
† These authors contributed equally to this work.



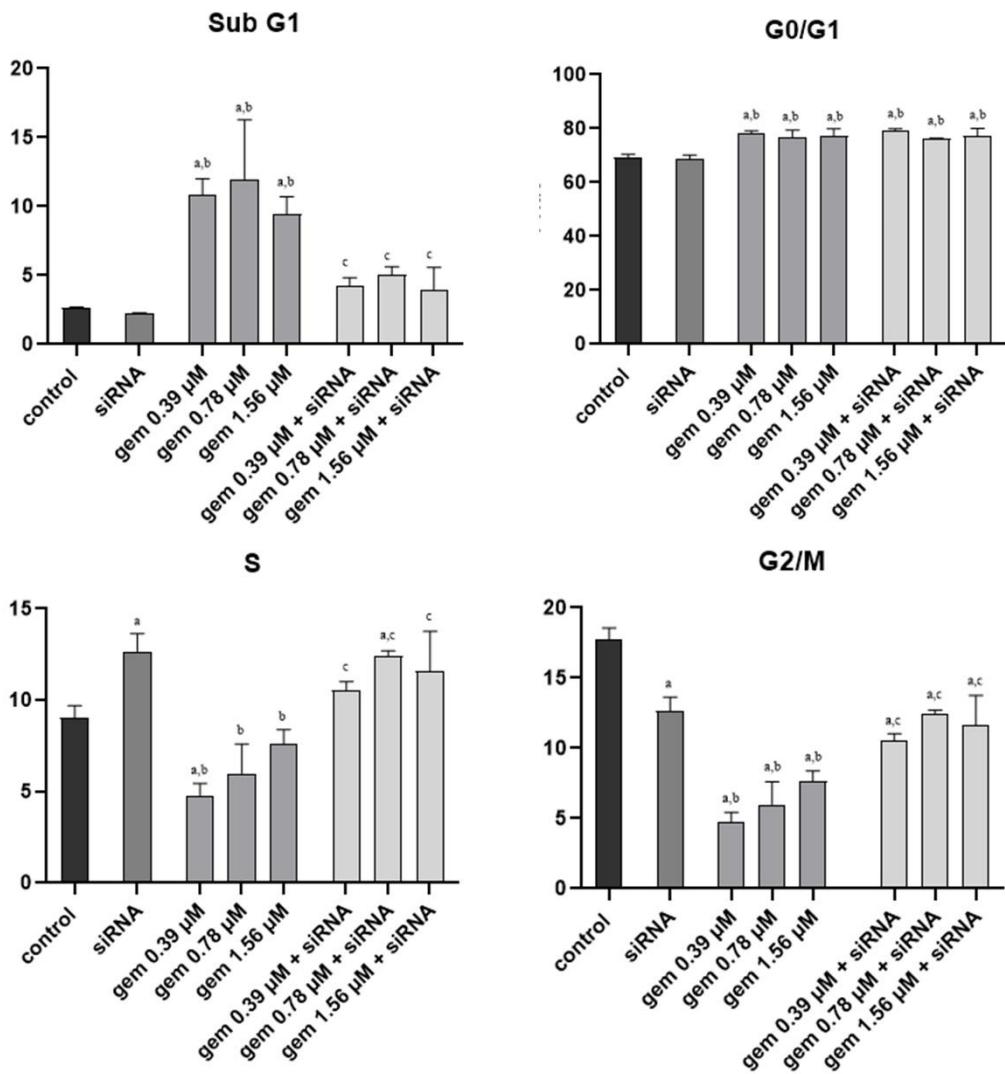
**Figure S1.** Chromosome location, structural organization, and length of *JHDM1D* and *JHDM1D-AS1* genes.



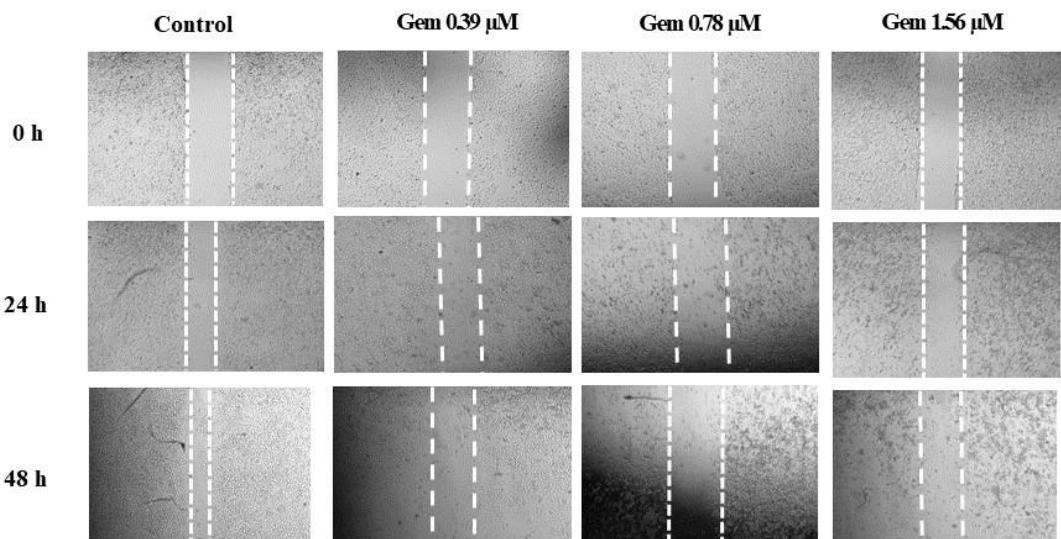
**Figure S2.** Relative expression of *JHDM1D-AS1* in J82 and UM-UC-3 cells after 72h of siRNA-*JHDM1D-AS1*.



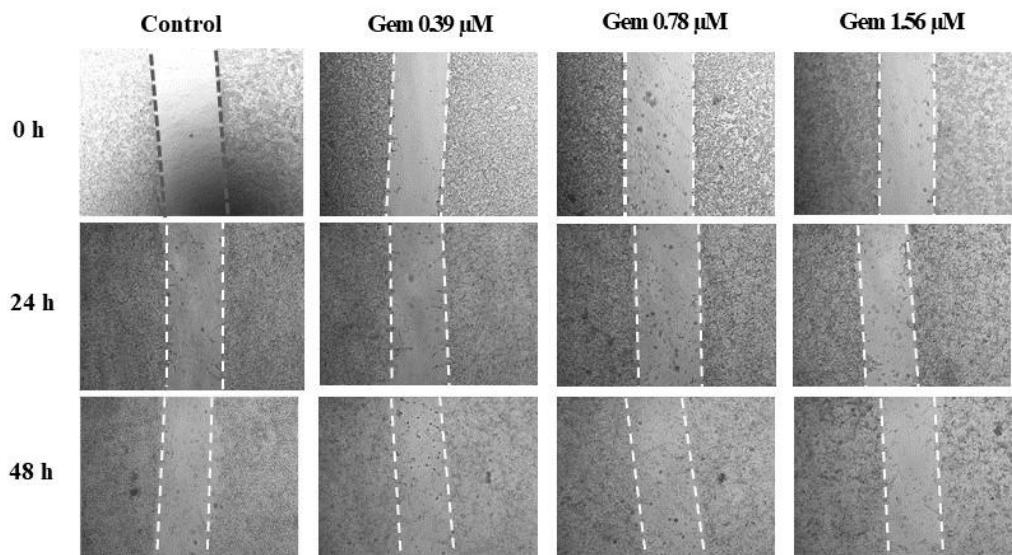
**Figure S3.** Percentage of J82 cells in each phase of cell cycle after treatment with gemcitabine, siRNA *JHDM1D-AS1*, or gemcitabine combined with siRNA *JHDM1D-AS1*. Control: untreated cells; gem: gemcitabine. a:  $p < 0.05$  compared to control; b:  $p < 0.05$  compared to siRNA; c:  $p < 0.05$  compared to respective gemcitabine concentration alone.



**Figure S4.** Percentage of UM-UC-3 cells in each phase of cell cycle after treatment with gemcitabine, siRNA *JHDM1D-AS1*, or gemcitabine combined with siRNA *JHDM1D-AS1*. Control: untreated cells; gem: gemcitabine. a:  $p < 0.05$  compared to control; b:  $p < 0.05$  compared to siRNA; c:  $p < 0.05$  compared to respective gemcitabine concentration alone.



**Figure S5.** Photographs of cell migration in J82 cells after treatment with gemcitabine. Control: untreated cells; Gem: gemcitabine.



**Figure S6.** Photographs of cell migration in J82 cells after treatment with gemcitabine. Control: untreated cells; Gem: gemcitabine.