



## Vero cells infected with the Lederle strain of canine distemper virus have increased Fas receptor signaling expression at 15 h post-infection

H.L. Del Puerto<sup>1</sup>, A.S. Martins<sup>2</sup>, G.F. Braz<sup>3</sup>, F. Alves<sup>3</sup>, M.B. Heinemann<sup>3</sup>, D.S. Rajão<sup>3</sup>, F.C. Araújo<sup>4</sup>, S.F. Martins<sup>2</sup>, D.R. Nascimento<sup>2</sup>, R.C. Leite<sup>3</sup> and A.C. Vasconcelos<sup>1</sup>

<sup>1</sup>Departamento de Patologia Geral, Instituto de Ciências Biológicas, Universidade Federal de Minas Gerais, Belo Horizonte, MG, Brasil

<sup>2</sup>Departamento de Fisiologia e Biofísica, Instituto de Ciências Biológicas, Universidade Federal de Minas Gerais, Belo Horizonte, MG, Brasil

<sup>3</sup>Departamento de Medicina Veterinária Preventiva, Escola de Veterinária, Universidade Federal de Minas Gerais, Belo Horizonte, MG, Brasil

<sup>4</sup>Faculdade de Medicina, Medicina Molecular, Universidade Federal de Minas Gerais, Belo Horizonte, MG, Brasil

Corresponding author: H.L. Del Puerto  
E-mail: [helendelpuerto@hotmail.com](mailto:helendelpuerto@hotmail.com)

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**ABSTRACT.** We evaluated the expression of the Fas receptor gene in Vero cells infected with the Lederle vaccine strain of canine distemper virus using RT-PCR. Vero cells were plated, and after being grown for 24 h in MEM with 5% FBS, 80-90% confluent monolayer cultures were infected with the virus. The cells were harvested at 3, 6, 9, and 15 h post-infection. Uninfected Vero cells were used as a control. Total RNA was isolated from Vero cells using 1 mL Trizol<sup>®</sup> LS, and RT was performed using 2 µg total RNA. Primer pairs for RT-PCR amplification for the canine distemper virus nucleocapsid gene, the S26 reference gene, and the Vero rFas gene were used to analyze expression in Vero cells. RT-PCR results revealed virus activity at 3, 6, 9, and 15 h in the virus-infected Vero cells. The S26 housekeeping gene was

amplified in virus infected and control samples. However, expression of the cell death receptor Fas was detected in Vero cells only at 15 h post-infection. We suggest that the Lederle vaccine induces apoptosis by Fas receptor signaling, possibly through caspase-8 signaling rather than through mitochondrial signaling in the infected cells.

**Key words:** Apoptosis; CDV; Fas receptor; RT-PCR; Vero cells