



**EX VIVO EXPANSION OF HUMAN HSC WITH GENOTOXICITY-FREE SENDAI VIRUS VECTOR TRANSIENTLY EXPRESSING HOXB4 ASSESSED BY SHEEP IN UTERO TRANSPLANTATION**

Shigeo Masuda<sup>1</sup>, Tomoyuki Abe<sup>1-3</sup>, Hiroshi Ban<sup>4</sup>, Satoshi Hayashi<sup>5</sup>, Hironori Takahashi<sup>1,5</sup>, Makoto Inoue<sup>4</sup>, Mamoru Hasegawa<sup>4</sup>, Yoshikazu Nagao<sup>2,3</sup>, Yutaka Hanazono<sup>1</sup>

<sup>1</sup>Division of Regenerative Medicine, Center for Molecular Medicine, Jichi Medical University, 3311-1 Yakushiji, Shimotsuke, Tochigi 329-0498, Japan; <sup>2</sup>Department of Agriculture, Utsunomiya University, 443 Shimokomoriya, Mohka, Tochigi 321-4415, Japan; <sup>3</sup>United Graduate School of Agricultural Science, Tokyo University of Agriculture and Technology, 3-8-1 Harumi-cho, Fuchu-shi, Tokyo 183-8538, Japan; <sup>4</sup>DNAVEC Corporation, 6 Ohkubo, Tsukuba, Ibaraki 300-2611, Japan; <sup>5</sup>Department of Obstetrics and Gynecology, National Center for Child Health and Development, 2-10-1 Ohkura, Setagaya, Tokyo 157-8535, Japan