

JRD Vol. 71 (6) 2025–Vol. 72 (1) 2026 の発刊のお知らせ

SRD 会員の皆様へ

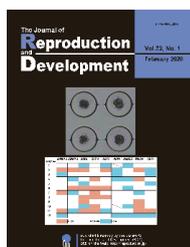
平素から The Journal of Reproduction and Development (JRD) の刊行にご協力を頂き有難うございます。Vol. 71 (6) および Vol. 72 (1) が発刊となりました。ご一読いただき、また論文執筆の際には活用いただけますようお願いいたします。

また JRD では皆様からの論文投稿をお待ちしています。

JRD 編集委員長 原山 洋

JRD Vol. 72 (1)

https://www.jstage.jst.go.jp/browse/jrd/72/1/_contents/-char/en



Original Article

Effects of timing and morphology of blastomere cleavage on gene expression profiles of bovine *in vitro* fertilized embryos

Shunki ONO, Hinano KOZUKA, Kota OKUBO, Takashi FUJII, Ken SAWAI

Volume 72, Issue 1, Pages 1-7

DOI <https://doi.org/10.1262/jrd.2025-035>

Cover Story:

Although the *in vitro* production (IVP) of bovine embryos makes a particularly important contribution to promoting sire and calf production, the low rates of conception after embryo transfer (ET) using *in vitro*-fertilized (IVF) embryos, along with the large-offspring syndrome, are serious problems constraining the efficacy of bovine IVP systems. In this regard, Sawai *et al.* have demonstrated the feasibility of evaluating the functionality and viability of bovine IVF embryos based on the expression patterns of 11 key genes at the blastocyst stage. In the present study, we examined the effects of timing and morphology of blastomere cleavage on pre-implantation development and the expression of these genes in IVF bovine embryos (Ono *et al.* Effects of timing and morphology of blastomere cleavage on gene expression profiles of bovine *in vitro* fertilized embryos. p. 1–7). Our findings in this study indicate the potential applicability of multifaceted evaluation techniques for bovine IVF embryos and the selection of the most suitable candidates for ET.

Optimization of a comprehensive metabolomic analysis system for characterizing metabolic alterations in the cauda epididymis of mature and juvenile mice

Ryusei MAEDA, Satohiro NAKAO, Yuichiro ARIMA, Ayana SHITASHIMIZU, Keisuke MASUDA, Naomi NAKAGATA, Toru TAKEO

Volume 72, Issue 1, Pages 8-15

DOI <https://doi.org/10.1262/jrd.2025-063>

Transgenic *Bax* gene efficiently induces lethality in mouse early embryos

Yuzuki GOTO, Takuto YAMAMOTO, Masahiro SAKATA, Satoshi MASHIKO, Daiki SHIKATA, Shinnosuke HONDA, Naojiro MINAMI, Shuntaro IKEDA

Volume 72, Issue 1, Pages 16-23

DOI <https://doi.org/10.1262/jrd.2025-054>

ATAD2 deficiency leads to subfertility by impairing spermatogenesis in mice

Rui WU, Shuyun ZHAO, Qi YU, Yili ZHAO, Yan HAN, Rong LIU, ChaoQun DUAN

Volume 72, Issue 1, Pages 24-33

DOI <https://doi.org/10.1262/jrd.2025-060>

JRD Vol. 71 (6)

https://www.jstage.jst.go.jp/browse/jrd/71/6/_contents/-char/en



Original Article

Effect of bovine oocyte transportation system on embryonic quality

Shunsuke HARA, Minori SHIDA, Kanami ABE, Koumei SHIRASUNA, Hisataka IWATA

Volume 71, Issue 6, Pages 301-309

DOI <https://doi.org/10.1262/jrd.2025-031>

Cover Story:

Ovum pick-up (OPU) is widely used technique in livestock production. In general, OPU is performed to collect oocytes, which are then transported to the laboratory. During transportation, the oocytes are cultured in air atmosphere. Hara *et al.* examined the effects of oocyte transportation (conventional and modified methods) on embryonic quality (Hara S, *et al.* The effect of oocyte transportation on embryonic quality. p. 301–309). The conventional method

induced mitochondrial dysfunction in oocytes and high DNA methylation in early embryos. However, the modified method, which uses a polysaccharide gel substrate, improved these effects. These results indicate that the modified method is a useful approach for oocyte transportation.

Technology Report

Evaluation of tubal patency with hysterosalpingo-contrast sonography using sodium alginate solution and the subsequent fertility outcomes in repeat breeder cattle

Kazuki ITO, Ryuji HASHIMOTO, Natsumi ENDO, Tomomi TANAKA

Volume 71, Issue 6, Pages 310-314

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