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Publications

Ashish Mishra, A. Dhali, I. J. Reddy, A. P. Kolte (2020). Sexing of preimplantation ovine embryos through polymerase chain reaction-based amplification of GAPDH, SRY and AMEL genes. *Reprod. Dom. Anim.*, 55(7): 885-892.

Ramesh Kumar G, **Ashish Mishra**, I. J. Reddy, A. Dhali and S. C. Roy (2020). Low oxygen tension activates glucose metabolism, improves antioxidant capacity and augment developmental potential of ovine embryos in vitro. *Anim. Prod. Sci.*, 60 (4):503-509

P. K. Javvaji, A. Dhali, J. R. Francis, A. P. Kolte, A. Mech, S. C. Roy, **Ashish Mishra** and R. Bhatta (2020). An Efficient Nitroblue Tetrazolium Staining and Bright-Field Microscopy Based Method for Detecting and Quantifying Intracellular Reactive Oxygen Species in Oocytes, Cumulus Cells and Embryos. *Frontiers in Cell and Developmental Biology METHODS*, published: 04 August 2020, doi: 10.3389/fcell.2020.00764

Ashish Mishra, Ramesh Kumar G, Arindam Dhali and I. J. Reddy (2020). Interaction of apoptosis and pluripotency related transcripts for developmental potential of ovine embryos produced *in vitro* at different oxygen concentrations. *Anim. Biotechnol.*, 2020 Feb 3;1-9. doi:10.1080/10495398.2020.1721513.

Arul Suresh, I.J. Reddy, **Ashish Mishra**, S. Mondal (2019). Suppression of COX-2 mRNA abundance in in vitro cultured goat (*Capra hircus*) endometrial cells by RNA interference and effect on PGF2- α and PGE2 concentrations. *Anim. Reprod. Sci.*, 2019:106146. doi: 10.1016/j.anireprosci.2019.106146.

Ashish Mishra, I. J. Reddy, A. Dhali and P. K. Javvaji (2018). L-Ergothioneine improves the developmental potential of in vitro sheep embryos without influencing OCTN1-mediated cross-membrane transcript expression. *Zygote*, 26(2): 149-161.

Ashish Mishra, I. J. Reddy, P. S. P. Gupta and S. Mondal (2018). Total RNA content in Sheep oocytes and developing embryos produced *in vitro*, a comparative study between Spectrophotometric and Fluorometric assay. *Cyto. Genet.*, 52 (1): 62-74.

Ashish Mishra, I. J. Reddy, P. S. P. Gupta and S. Mondal (2017). Expression of apoptotic and antioxidant enzyme genes in sheep oocytes and in vitro produced embryos. *Anim. Biotechnol.*, 28(1): 18-25.

Ashish Mishra, I. J. Reddy, P.S.P. Gupta and S. Mondal (2016). L-Carnitine mediated reduction in oxidative stress and alteration in transcripts level of antioxidant enzymes in sheep embryos produced *in vitro*. *Reprod. Dom. Anim.*, 51 (2): 311-321.

Ashish Mishra, I. J. Reddy, P. S. P. Gupta and S. Mondal (2016). Developmental regulation and modulation of apoptotic genes expression in sheep oocytes and embryos cultured in vitro with L-carnitine. *Reprod. Dom. Anim.*, 51 (6): 1020-1029.