

3. 繁殖・生殖工学

データ閲覧・コメント入力可能期間：2021年3月28日0時～4月3日24時（予定）

[P3-18] Analysis of WNT/ β -catenin pathway in Bovine Endometrial Cells *In Vitro*

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It is reported that the WNT/ β -catenin pathway is important for endometrial remodeling and embryo implantation. The present study aimed to analyze the WNT/ β -catenin pathway in the bovine endometrial cells. Gene expression of potential WNT/ β -catenin pathway components in bovine endometrial epithelial cells (BEE) and stromal cells (BES) were analyzed by RT-PCR. Then, BEE was treated with WNT/ β -catenin pathway agonist AMBMP *in vitro*. The β -catenin protein level was measured by western blotting and the amounts of downstream genes were analyzed by qPCR. WNT/ β -catenin pathway ligands *Wnt2* was detected in both BEE and BES, *Wnt3* was not detected in both types of cells, and *Wnt7A* was only detected in BEE. WNT/ β -catenin pathway receptors *LRP5*, *LRP6*, *FZD1*, *FZD4*, and *FZD7* were detected in both cells. The mRNA for the potential WNT7A-specific receptor *FZD5* was expressed only in BEE. Treatment of AMBMP significantly increased the amount of β -catenin protein in BEE. In conclusion, it was demonstrated that the BEE process a functional WNT/ β -catenin pathway *in vitro*. The amounts of downstream genes in the WNT/ β -catenin pathway are currently being analyzed.