Mesenchymal stem cells from the domestic ungulates: trends and outliers

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Mesenchymal stem cells (MSCs) are a valuable source for regenerative therapy and tissue engineering. MSCs are multipotent adherent stem cells that can be isolated from different adult and fetal tissues. In contrast to human MSCs, MSCs from large animal models have not yet been described by the uniform criteria, which include the characteristic phenotype of surface mol ...

Research progress of gene editing technology CRISPR/Cas9 system in animal gene editing

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Gene editing technology, from the beginning of RNA interference (RNAi) technology to efficient developed enzyme technology, has been widely used in recent years. These efficient enzyme technologies include zinc finger nuclease (ZFN) technology, transcriptional activation-like effector nuclease (TALENs) technology, and clustered regularly interspaced short palindromic ...
Structural characteristics of the control region of the Beaufortia kweichowensis mitochondrial genome

In present study, we identified the structural characteristics of the Beaufortia kweichowensis mtDNA control region using the next-generation sequencing method. Result showed that the control region could be further divided into three parts, including the extended termination associated sequence domain (ETAS), the central conserved domains (CSB-F, CSB-E, CSB-D) and th ...

Factors affecting Somatic Cell Count in milk of dairy cows in Costa Rica

Somatic cells, such as bacteria fighting leukocytes, are present in cow’s milk as an immune response to combat intramammary infection. The primary objective of this study was to determine the effect of various factors on the somatic cell count, or SCC, within the milk of dairy cows. Factors studied in comparison to the SCC include the number of bacteria within the ...

Effects of phytogenic products on gut morpho-histology of broiler chickens

The objective of this experimental survey is to distinguish the effect of phytogenic products (Volarom®) as an alternative to antibiotic growth promoters (AGP) on the gut morpho-histology of broilers chickens, reared under optimal environmental conditions. Undred 1-day- Cobb strain chick males were divided into 2 groups (control and experimental).
Mini Review

Staphylococcus aureus: A brief review

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Staphylococcus aureus, also known as “golden staph”, is a gram-positive coccus belonging to the class Bacilli, order Bacillales, family Staphylococcaceae and genus Staphylococcus [1]. It is a facultative anaerobe often positive for catalase and nitrate reduction and is coagulase variable i.e. maybe coagulase positive or negative [2]. The bacterium is non-motile, non-sp ...