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## Comparative Characteristics of Mesenchymal Stem Cell Lines from Different Animal Species

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In recent years, in veterinary medicine, there have been increasing reports of cell therapy using animal mesenchymal stem cells (MSCs). In most of these investigations, animal MSCs are described without the necessary immunophenotypic characteristics, and in vitro differentiation is rarely performed. The lack of specific single marker for MSCs and limited availability of animal MSCs antibodies complicate these studies. In this work, we described the immunophenotypes of MSCs lines isolated from the subcutaneous adipose tissue of dogs, cats, horses, pigs, mice, rats, and humans. The data obtained showed a successful differentiation in the osteogenic, chondrogenic and adipogenic lineage for all cells.

**Keywords:** mesenchymal stem cells, identification, animals