

Supplementary Table 1. Proteins reported in literature versus this study

Gene symbol	Name	Organisms	Method	Presence/absence	Reference
<i>Sox9</i>	Transcription factor Sox-9-A	Bovine, Human, canine	In-situ hybridization	-	Sive et al., 2002 ¹¹
<i>ACAN</i>	Aggrecan	Bovine, Human, canine	Microarray	+	Pattappa et al., 2012 ¹²
<i>COL2A1</i>	Collagen Type II A	Bovine, Human, canine	Microarray	+	Lee et al., 2007 ¹³
<i>KRT19</i>	Keratin 19	Bovine, Human, canine	Microarray	+	Minogue et al., 2010 ¹⁴
<i>KRT18</i>	Keratin 18	Bovine, Human, canine	Microarray	+	Minogue et al., 2010 ¹⁴ , Sakai et al., 2009 ¹⁵
<i>NCAM1</i>	Neural cell adhesion molecule 1	Bovine, canine	Microarray	-	Minogue et al., 2010 ¹⁴ , Sakai et al., 2009 ¹⁵
<i>KRT8</i>	Keratin 8	Bovine, Human, canine, Murine	Transcriptomic profiling	+	Minogue et al., 2010 ¹⁴
<i>SNAP25</i>	Synaptosomal-associated protein 25	Bovine	Transcriptomic profiling	-	Minogue et al., 2010 ¹⁴
<i>CDH2</i>	Cadherin-2	Bovine	Transcriptomic profiling	-	Minogue et al., 2010 ¹⁴
<i>SOSTDC1</i>	Sclerostin domain-containing protein 1	Bovine	Transcriptomic profiling	-	Minogue et al., 2010 ¹⁴
<i>GPC3</i>	Glypican-3	Murine	Transcriptomic profiling, proteome analysis	-	Lee et al., 2007 ¹³
<i>ANXA3</i>	Annexin A3	Murine	Transcriptomic profiling	+	Lee et al., 2007 ¹³
<i>PTN</i>	Pleiotrophin	Murine	Transcriptomic profiling	-	Lee et al., 2007 ¹³
<i>A2M</i>	alpha-2-macroglobulin	Human	Microarray	+	Rodrigues-Pinto et al., 2013 ¹⁶
<i>DSC2</i>	Desmocollin-2, cell surface markers	Human, Canine	Microarray	+	Sakai et al., 2009 ¹⁵
<i>VIM</i>	Vimentin	Murine	Transcriptomic profiling	+	Lee et al., 2007 ¹³
<i>Pax-1</i>	Paired box protein Pax-1	Human	Transcriptomic profiling	-	Richardson et al., 2017 ¹⁷
<i>CA12</i>	carbonic anhydrase-12	Human	Transcriptomic profiling	-	Richardson et al., 2017 ¹⁷ , Minogue et al., 2010 ¹⁴
<i>CD24</i>	cluster differentiation 24 (cell surface marker)	Murine	Transcriptome	-	Fujita et al., 2005 ¹⁸ , Tang et al., 2012 ¹⁹
<i>TNFAIP6</i>	TNF alpha-induced protein 6	Bovine	Microarray analysis	+	Minogue et al., 2010 ¹⁴
<i>FOXF1</i>	N-cad, forkhead box F1	Bovine, Human	Microarray analysis	-	Richardson et al., 2017 ¹⁷ , Minogue et al., 2010 ¹⁴
<i>FOXF2</i>	Forkhead box protein F2	Bovine	Microarray analysis	-	Minogue et al., 2010 ¹⁴

Candidate IVD-associated proteins/genes previously reported based on the proteome, transcriptional, immunolocalization analysis of human, murine, bovine and canine IVD. +/- indicates the presence/absence in our study.