

Figure S1: (a) This schematic diagram illustrates the study design including questions, hypothesis and aims, experimental flow, targeted objectives and the main results. (b–g) Representative images of 901 ASCs stained with Oil Red O (red) following adipogenic differentiation in 5 µM Rosiglitazone (Rosi 5) and 3-isobutyl-1-methylxanthine-based medium (IBMX) up to day 14 post induction in cat (c, d) and chicken (f, g). Non-induced cells in basal medium (BM, b, e) served as negative controls. Evidence of promoted adipogenic differentiation as indicated 904 by red fat droplets (black arrow) under 5 µM of rosiglitazone compared to IBMX-based protocol. Note: increased detached round cells (arrow head) in IBMX condition for both species. Scale bar = 100 µM.

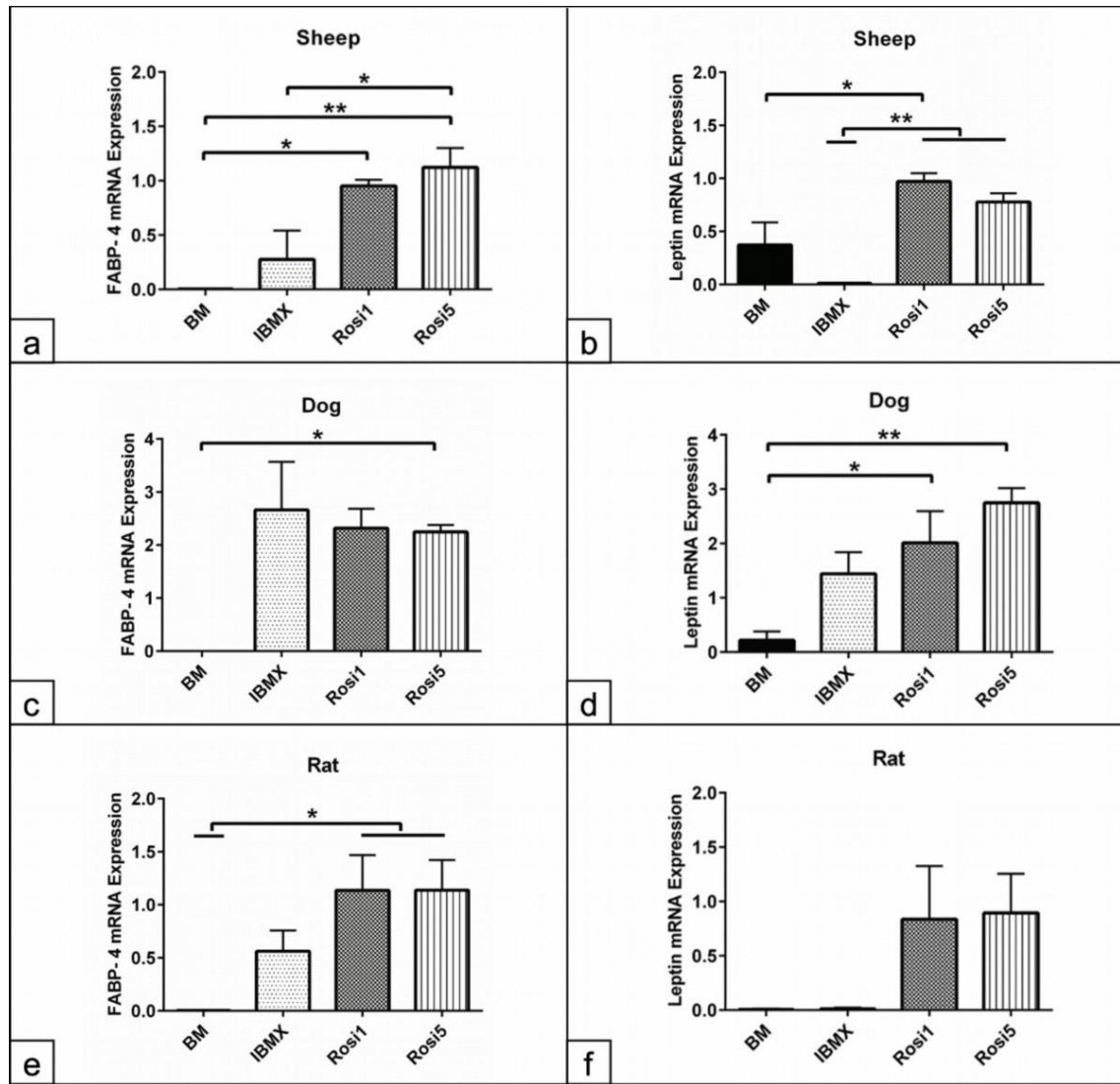


Figure S2. Quantification of the relevant adipogenic differentiation marker expression. (a–f) Quantitative RT-PCR of cells lysates from sheep (a, b), dog (c, d), rat (e, f) cells following 14 days of adipogenic induction in 3-isobutyl-1-methylxanthine-based medium (IBMX), 1 μ M rosiglitazone (Rosi 1), 5 μ M rosiglitazone medium. For all experimental groups, 1 μ g of the harvested RNA (n = 4) was reverse transcribed. By using the relevant primers, the adipogenic markers; Fatty acid binding proteins-4 (*FABP-4*) and *Leptin* expression were measured. The data analysis reveals the upregulation of *FABP-4* expression in the Rosi 1- and Rosi 5-, and IBMX-based conditions compared with BM in all species. All data presented as mean \pm SEM. * = p < 0.05, ** = p < 0.01.

Table S1: Antibodies used for ASCs identification

<i>Positive-Marker</i>	<i>Company</i>	<i>Host species</i>	<i>Target</i>	<i>Human</i>	<i>Dog</i>	<i>Horse</i>	<i>Sheep</i>	<i>Rat</i>	<i>Mouse</i>
<i>CD29 # Ha2/5</i>	BD Pharmingen	Hamster	Ra					+	+
<i>CD29 # MEM101A</i>	Biomol	Mouse	Human	+	+		+		
<i>CD44 # IM7</i>	Thermofisher	Rat	Mouse	+		+		+	+
<i>CD44 # MEM-263</i>	Novusbio	Mouse	COS-7 cells	+	+		+		
<i>CD73 # 5F/B9</i>	BD Pharmingen	Mouse	Rat					+	
<i>CD90 # 5E10</i>	Stemcell	Mouse	Human	+		+			
<i>CD90 # YKIX337.217</i>	Biorad	Rat	Dog		+				
<i>CD90 # OX-7</i>	Biorad	Mouse	Rat					+	+
<i>CD90 # Thy1.2</i>	Thermofisher	Rat	Mouse						
<i>CD105 # SN6</i>	Biorad	Mouse	Human	+		+			
<i>MHC I # CVS22</i>	Biorad	Mouse	Horse			+			
<i>Negative-Marker</i>									
<i>CD45 # UHCL1</i>	Thermofisher	Mouse	Human	+	+				
<i>CD45 # OX-1</i>	Biorad	Mouse	Rat					+	
<i>CD45 # 30F11</i>	Miltenyibiotec	Rat	Mouse						+
<i>MHC II # CVS20</i>	Biorad	Mouse	Horse	+	+	+			
<i>CD11b # WT.5</i>	BD Pharmingen	Mouse	Rat					+	
<i>CD41/CD61 #CO.35E4</i>	Biorad	Mouse	Sheep			+	+		

(+) positive signal