**Supplementary Table S1.** Description of the function of evaluated genes

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| --- | --- | --- |
| Gene | Function | Reference |
| ACACAα | Encodes the protein ACCα; Provides cytoplasmic malonyl-CoA for FA synthesis. | Bernard *et al.*, 2008 |
| FASN | Encodes the protein FAS;Synthesis of short- and medium-chain FA (C4-C16). | Wakil, 1989 |
| SCD1 | Catalyzes the Δ-9 desaturation, introducing a *cis* double bond, mainly from C14 to C19. | Bernard *et al.*, 2008 |
| LPL | Catalyzes the hydrolysis of lipoprotein triacylglycerol, releasing FA esterified. | Bernard *et al.*, 2008 |
| FABP3 | Uptake and intracellular trafficking of FA. | Lehner & Kuksis, 1996 |
| AGPAT6 | Triglyceride synthesis. | Bernard *et al.*, 2008 |
| DGAT1 | Triglyceride synthesis. | Bernard *et al.*, 2008 |
| CSN1S1 | Colloidal CaPO4 transport. | Stewart *et al*., 1984; Stewart *et al*., 1987  |
| CSN2 | Curd formation when the milk is clotted by chymosin. | Stewart *et al*., 1987 |
| CSN3 | Stabilizes the casein micelles;When cleaved by chymosin, causes initiation of micelle aggregation, resulting in curd formation. | Mackinlay & Wake, 1971 |
| LALBA | Lactose synthesis. | Kuhn, 1983 |

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