Supplementary material

Table 1. List of the differentially abundant significant MFGM proteins identified in the camel milk between Safra and Wadha breed using 2D-DIGE mass spectrometry. Protein name, accession numbers (according to Uniprot database), pI values (according to SWISSPROT), protein MW, MS % coverage and MASCOT scores database are listed.

Spot Number	Accession Number[a]	Protein name	Pi[b]	MW[c]	Cov%[d]	Score[e]
358	Q9TUM0	Lactotransferrin	8.66	79158	28	123
396	P79385	Lactadherin	6.18	46722	28	166
699	A1L520	ADP-ribosylation factor GTPase-activating protein 2	8.07	57065	17	57
821	Q4TVR5	Dual serine/threonine and tyrosine protein kinase	6.4	106163	17	57
858	P10950	Acetyls erotonin O-methyl transferase	5.64	38470	24	56
864	Q9TUM0	Lactotransferrin	8.66	79158	36	125
871	P18892	Butyrophilin subfamily 1 member A1	5.11	59923	25	99
898	P20414	Metalloproteinase inhibitor 1	8.47	23700	29	57
916	P26234	Vinculin	5.62	124437	12	57
917	Q9TUM0	Lactotransferrin	8.66	79158	42	173
1001	P79385	Lactadherin	6.18	46722	10	170
1004	A4FUZ6	Hydroxysteroid dehydrogenase-like protein 2	8.46	45519	23	61
1005	P79385	Lactadherin	6.18	46722	16	60
1009	Q3MHZ7	GPI-anchor transamidase	5.8	45486	22	58
1011	Q3MHZ7	GPI-anchor transamidase	5.8	45486	22	58
1026	Q148H8	Keratin, type II cytoskeletal 72	7.86	57578	30	69
1039	Q9MYY3	Vitamin K-dependent gamma-carboxylase	8.47	88024	15	58
1040	Q3MHR7	Actin-related protein 2/3 complex subunit 2	6.84	34442	29	58
1054	P26234	Vinculin	5.62	124437	13	62
1056	Q148H8	Keratin, type II cytoskeletal 72	7.86	57578	18	70

Spot Number	Accession Number[a]	Protein name	Pi[b]	MW[c]	Cov%[d]	Score[e]
1063	P79385	Lactadherin	6.18	46722	27	57
1066	Q3MHZ7	GPI-anchor transamidase	5.8	45486	22	58
1072	P33545	Desmocollin-2	5.07	97069	16	57
1078	P79385	Lactadherin	6.18	46722	33	72
1103	P0CB32	Heat shock 70 kDa protein 1-like	5.89	70744	12	59
1155	A4FUZ6	Hydroxysteroid dehydrogenase-like protein 2	8.46	45519	19	67
1181	P79385	Lactadherin	6.18	46722	16	72
1210	Q0IIF2	Translation initiation factor eIF-2B subunit alpha	6.90	34134	39	58
1225	Q9TUM0	Lactotransferrin	8.66	79158	42	163
1235	P79385	Lactadherin	6.18	46722	22	57
1346	P00710	Alpha-lactalbumin	5	14877	38	66
1373	P17290	Tryptophan 5-hydroxylase 1	6.95	51599	31	63
1384	P79385	Lactadherin	6.18	46722	26	57
1407	Q95L54	Annexin A8	5.3	36992	28	59
1416	Q3SZV0	Tetratricopeptide repeat protein 36	5.09	20660	23	57
1423	Q3SZV0	Tetratricopeptide repeat protein 36	5.09	20660	23	60
1429	P10173	Fumarate hydratase, mitochondrial	7.01	50149	14	57
1460	Q9TT91	E3 ubiquitin-protein ligase makorin-1	5.16	54296	10	58
1583	Q3SZV0	Tetratricopeptide repeat protein 36	5.09	20660	23	60
1613	P79385	Lactadherin	6.18	46722	46	129
1639	P79385	Lactadherin	6.18	46722	23	57
1648	P48818	Very long-chain specific acyl-CoA dehydrogenase, mitochondrial	8.74	71003	16	58
1662	Q2KJE0	Tax1-binding protein 1 homolog	5.34	94855	15	60
1676	Q3SZN0	Septin-6	6.35	49080	21	58

[a] Protein accession numbers based on UNIPROT Database.
[b] Theoretical isoelectric point.
[c] Theoretical relative mass.
[d] MASCOT coverage
[e] MASCOT score

Table S2: Characteristics of the two Saudi Arabian camel breeds Safra and Wadha and the respective milk samples obtained from them.

Variables	**WADHA**	**SAFRA**
Number of sample	5	5
Age (years)	7.5 ± 1.67	6.9 ± 1.94
Quantity of milk/ week (L)	40 ± 3.53	22 ± 10.36
Age of calf (month)	13 ± 0.7	10 ± 2.16
No. of delivery	2 ± 0.7	1 ± 0,5
Season	Spring	Spring
Type of Food	Sugar cane Bread Alfalfa	Sugar cane Bread Alfalfa
Location	Alharazat Alsawarekh province Jeddah city	Alharazat Alsawarekh province Jeddah city
No. of males in the flock	1.6 ± 0.54	1 ± 0
Time and Date of Sampling	Early morning 2-3-2017	Early morning 5-3-2017

Table S3: Experimental design: The 10 camel milk samples were run on 5 analytical 2D-DIGE gels, labeled randomly with Cy3 and Cy5, and a pooled sample, used as an internal standard, was labeled with Cy2.

Gel number	Cy3	Cy5	Cy2
G1	SAFRA 1	WADHA1	Pooled Sample
G2	WADHA2	SAFRA2	Pooled Sample
G3	SAFRA3	WADHA3	Pooled Sample
G4	WADHA4	SAFRA4	Pooled Sample
G5	SAFRA5	WADHA5	Pooled Sample