Supplementary Table 2: Histone Demethylases in RMS patient samples by subtype

			ERMS		ARMS Fusion Neg	
			Expression[a]		Expression[a]	
ENTREZ	**Gene**	**Probe**	**n = 36**	**p-value[b]**	**n = 20**	**p-value[b]**
54620	FBXL19	228277_at	0.8780	0.0167	0.9327	0.0243
55806	HR	241355_at	0.8357	0.2809	0.8253	0.5248
79663	HSPBAP1	219284_at	1.1226	0.3130	1.1395	0.4984
3720	JARID2	203297_s_at	2.0956	0.0000	2.1097	0.0000
80853	JHDM1D	221778_at	0.6158	0.0002	0.7022	0.0692
221037	JMJD1C	221763_at	4.2816	0.0000	4.8588	0.0000
65094	JMJD4	218560_s_at	1.2839	0.0000	1.2909	0.0002
79831	JMJD5	220070_at	0.9123	0.0834	0.9117	0.2042
23210	JMJD6	212723_at	2.1009	0.0000	2.2332	0.0000
100137047	JMJD7	222256_s_at	0.8610	0.2119	0.8615	0.1954
339123	JMJD8	224886_at	1.1217	0.1633	1.2200	0.0125
23028	KDM1A	212348_s_at	1.6008	0.0000	1.6307	0.0000
221656	KDM1B	227021_at	1.5053	0.0016	1.7100	0.0007
22992	KDM2A	208989_s_at	1.2527	0.0043	1.1164	0.1324
84678	KDM2B	226215_s_at	3.0218	0.0000	3.2672	0.0000
55818	KDM3A	212689_s_at	4.5031	0.0000	4.2191	0.0000
51780	KDM3B	210878_s_at	1.0864	0.8881	1.3888	0.1029
9682	KDM4A	203205_at	1.9127	0.0000	1.7867	0.0001
23030	KDM4B	212496_s_at	1.9246	0.0000	2.2235	0.0000
23081	KDM4C	214861_at	1.0566	0.9980	0.9647	0.3364
55693	KDM4D	220278_at	1.2554	0.0011	1.1087	0.6898
5927	KDM5A	226371_at	2.5999	0.0000	2.8456	0.0000
10765	KDM5B	201549_x_at	7.0812	0.0000	5.8114	0.0000
8242	KDM5C	202383_at	0.7778	0.0064	0.6527	0.0003
8284	KDM5D	206700_s_at	0.5561	0.8512	1.2959	0.9996
7403	KDM6A	203992_s_at	1.7717	0.0000	2.0171	0.0000
23135	KDM6B	41386_i_at	1.5232	0.0000	1.6113	0.0000
84864	MINA	213188_s_at	1.9291	0.0000	1.9340	0.0146
79697	NO66	219526_at	1.6269	0.0215	2.0102	0.0000
5253	PHF2	212726_at	1.2086	0.0000	1.1993	0.0138
23133	PHF8	212916_at	1.6900	0.0000	1.9277	0.0000
7404	UTY	211149_at	0.9955	0.2107	1.1389	0.5623

[a]Fold changes calculated against the median expression level of skeletal muscle samples, considered significant if above 2

[b]p-values from t-tests examining differential expression compared to skeletal muscle (Bonferroni adjusted p-value=0.0016)