

Supplemental Table 1. miRNA expression profile in HMEC-1

Gene symbol	Locus	No. Of transcripts - Ctrl	No. Of transcripts - UTP
MIR186	1:71533358-71533388	3,87E+07	3,53E+07
<b>MIR22</b>	<b>17:1617204-1617269</b>	<b>1,28E+07</b>	<b>1,83E+07</b>
MIR146A	5:159912374-159912405	8,67E+06	8,86E+06
MIR30E	1:41220039-41220108	4,81E+06	4,64E+06
MIR155	21:26946292-26946334	3,52E+06	2,85E+06
MIR100	11:122022810-122023025	2,78E+06	2,75E+06
MIR30D	8:135817119-135817186	2,37E+06	2,20E+06
MIR127	14:101349237-101349397	1,94E+06	1,86E+06
MIR19B2	X:133303709-133303737	1,89E+06	1,55E+06
MIR1910	16:85775270-85775298	1,80E+06	1,41E+06
MIR143	5:148808537-148808563	1,66E+06	2,13E+06
MIR192	11:64658630-64658698	1,55E+06	1,59E+06
MIR28	3:188406577-188406646	1,41E+06	1,55E+06
MIR125A	19:52196497-52196680	1,28E+06	1,18E+06
<b>MIR486</b>	<b>8:41517959-41518025</b>	<b>1,25E+06</b>	<b>2,82E+06</b>
MIR26B	2:219267377-219267438	1,25E+06	1,01E+06
MIR215	1:220291252-220291280	1,08E+06	970044
MIR195	17:6920943-6921008	1,01E+06	878021
MIR1307	10:105154051-105154120	1,00E+06	1,03E+06
MIR450B	X:133674256-133674284	854749	748535
MIR328	16:67236227-67236253	666182	500112
MIR548K	11:70130088-70130114	649350	422035
MIR577	4:115577926-115577952	632367	492514
MIR30A	6:72113197-72113419	628967	611052
MIR589	7:5535462-5535528	556492	491985
MIR1468	X:63005931-63005957	496567	530426
MIR146B	10:104196273-104196376	495106	528633
MIR181B1	1:198828012-198828262	397711	429849
MIR411	14:101489673-101489833	385899	368719
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MIRLET7G	3:52302278-52302376	339893	355350
MIR126	9:139565044-139565226	325057	361157
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MIR335	7:130135964-130136026	239168	147881
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MIR487B	14:101512802-101512867	227051	188161

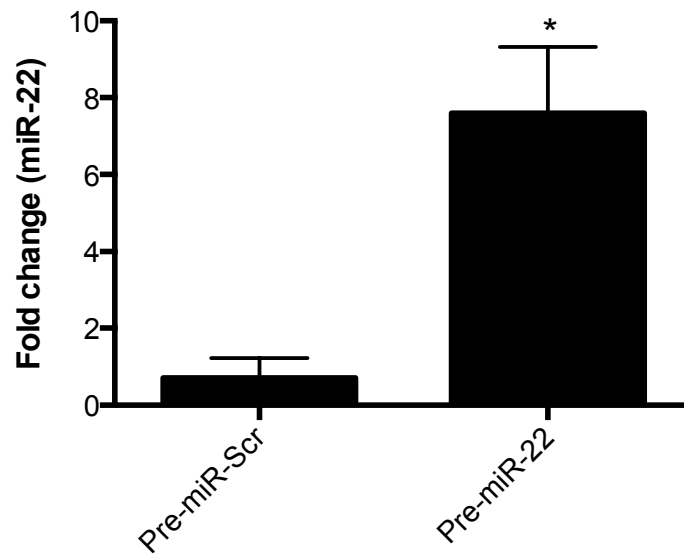
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MIR935	19:54485602-54485639	161884	108438
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MIR454	17:57215142-57215212	136969	126394
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MIR136	14:101351029- 101351111	115948	100496
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MIR660	X:49777840-49777923	109914	107815
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MIR561	2:189162241-189162301	107273	91555,5
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MIR744	17:11985204-11985335	98414,7	97598,1
MIR3187	19:813624-813652	96692	88347,7
MIRLET7D	9:96941119-96941297	93616,7	90158,3
MIR584	5:148441894-148441960	93603,8	85233,1
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MIR432	14:101350830- 101350902	89011	85508,3
MIR184	15:79502179-79502206	81591,4	83353,7
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MIR493	14:101335382- 101335476	80258,2	75609,7
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MIR221	X:45605603-45605773	65012,3	57148,2
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MIR323B	14:101522546-101522628	56025,8	55364,7
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MIR887	5:15935277-15935364	50401,2	33188,1
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MIR212	17:1953581-1953646	23935,5	29255,1
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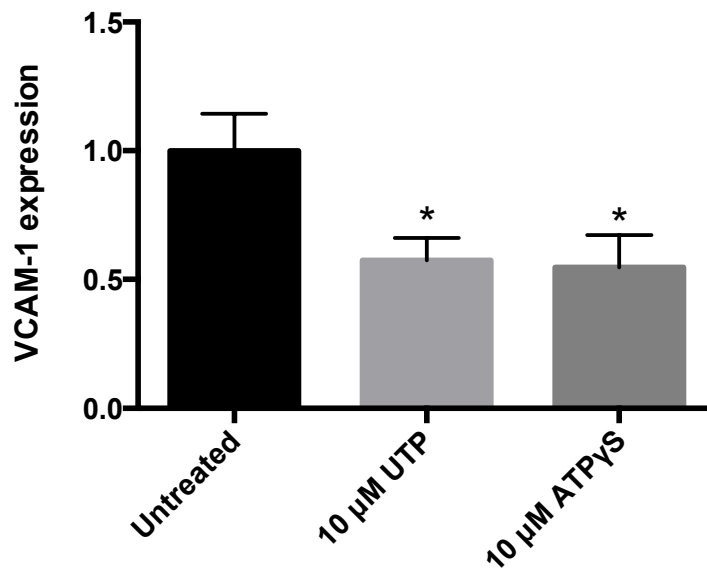
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MIR2277	5:92956415-92956479	10612,2	11719,6
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MIR33B	17:17717169-17717232	9001,36	5537,52
MIR137	1:98511644-98511704	8851,82	13606,7
MIR29B2	1:207975728-207975880	8577,25	7340,9
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MIR193A	17:29887013-29887133	8097,31	6399,53
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MIR361	X:85158641-85158729	7328,85	6427,44
MIR21	17:57918335-57918750	7084,99	9934,17
MIR412	14:101531648- 101532321	6727,92	5404,33
MIR188	X:49768120-49768183	6626,14	4192,85
MIR324	17:7126624-7126783	6115,08	6226,54
MIR18A	13:92002868-92003736	5722,95	6387,29
MIR652	X:109298552-109298639	5619,51	6071,72
MIR760	1:94313122-94313223	5588,1	3024,98
MIR183	7:129414718-129414830	5428,87	5292
MIR656	14:101533048- 101533124	5323,64	4726,79
MIR338	17:79099683-79099766	5321,32	4332,3
MIR139	11:72326108-72326213	4983,39	3231,18
MIR760	1:94312396-94312458	4596,56	6195,51
MIR1293	12:50627926-50627991	4253,85	3352,78
MIR34C	11:111384173- 111384229	4181,2	1647,81
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MIR1226	3:47891042-47891121	3459,96	3031,7

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MIR1262	1:68649250-68649284	3106,06	28241,1
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MIR889	14:101514244- 101514395	2642,44	2087,68
MIR1294	5:153726709-153726772	2584,12	9390,44
MIR144	17:27188564-27188624	2451,51	5065,45
MIR758	14:101492081- 101492432	2308	2701,1
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MIR377	14:101528229- 101528453	1621,16	1280,3
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MIR485	14:101521633- 101521823	1464,78	697,607
MIR214	1:172107848-172108020	1045,27	651,966
MIR152	17:46114401-46114601	951,118	606,614
MIR374A	X:73506961-73507183	936,208	746,644
MIR380	14:101491247- 101491414	859,243	771,069
MIR663	20:26188680-26188899	854,874	91,9567
MIR548E	10:112748692- 112748824	591,032	314,935
MIR337	14:101340829- 101340954	515,443	548,477
MIR433	14:101348136- 101348382	497,824	370,763
MIR376C	14:101506066- 101506281	396,699	384,325
MIR154	14:101526083- 101526263	351,468	267,387
MIR496	14:101526832- 101527049	316,498	296,657
MIR495	14:101500072- 101500368	314,961	549,385

**Supplemental Figure 1. miR-22 expression in HMEC-1 transfected with pre-miR-22.** HMEC-1 cells were transfected with 100 nM pre-miR-22 or pre-miR-Scr and miR-22 expression was analyzed after 24 hours by qRT-PCR. Expression levels were normalized to those of U6 RNA and expressed relative to the mean of cells transfected with pre-miR-Scr. Each treatment was performed in triplicates and results from two independent experiments are shown.



**Supplemental Figure 2. VCAM-1 surface expression in HMEC-1 after treatment with UTP and ATP $\gamma$ S.** HMEC-1 were treated with 10  $\mu$ M UTP or ATP $\gamma$ S for 24 hours and the VCAM-1 surface expression was assessed with flow cytometry. \*p<0.05 compared to untreated cells. Each treatment was performed in triplicates and results from two independent experiments are shown



**Supplemental Figure 3. miR-22-5p expression in HMEC-1 after treatment with UTP and ATP $\gamma$ S.** HMEC-1 were treated with UTP or ATP $\gamma$ S the indicated times and doses. Expression levels were normalized to U6 RNA and expressed as mean of untreated cells at each time point.

