

**Fructose-mineralized black phosphorus for syncretic bone  
regeneration and tumor suppression**

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Table 1 The FPKM value of caspase-related genes in 143B cells

	BPs	CaBPs-Na <sub>2</sub> FDP@CaCl <sub>2</sub>
CASP10	0.053080496	0.063459744
CASP8	1.869275062	1.990203874
CASP2	2.285581498	2.650714718
CASP9	1.745872398	1.945718747
CASP6	2.680524084	2.78385306
CASP3	4.058383087	3.411986617
CASP7	4.850134827	5.206478798

Table 2 The FPKM value of antiapoptotic protein-related genes in 143B cells

	BPs	CaBPs-Na <sub>2</sub> FDP@CaCl <sub>2</sub>
BCL7C	1.898976044	1.19400846
BCL11A	1.390650972	1.039109939
BCL2A1	2.311306951	1.327446026
BCL2L11	3.353531698	2.7781435
BCL6B	0.093403523	0.05790164
BCL2L2-PABPN1	0.256859689	0.106153007
BCL2	0.84737357	0.728097519

Table 3 The FPKM value of cytochrome C-related genes in 143B cells

	BPs	CaBPs-Na <sub>2</sub> FDP@CaCl <sub>2</sub>
COX10	8.550076862	9.104788702
HCCS	18.96683517	21.52894445
BCS1L	23.88108426	27.47380575
UQCC1	12.13500339	12.29255645
COX7A2	62.5016334	64.98999722
COX4I2	0.101105707	0.470072174
COX16	2.469890594	2.59194413
COX6B2	0.181827199	0.371963562
COA7	24.99799611	25.64044259
COX18	1.580457863	1.839265197
COX11	7.68481663	8.314658855
COA6	9.519226065	9.841191074
COX14	6.345581803	6.484088343
COA4	55.32734702	57.82671561
COX8C	0.124796528	0.348130942
COX20	0.118406509	0.233966339

UQCC3	0.790117692	0.813419009
PET100	0.467771218	0.492958122

Table 4 The FPKM value of proapoptotic protein-related genes in 143B cells

	BPs	CaBPs-Na <sub>2</sub> FDP@CaCl <sub>2</sub>
BAX	26.77351038	29.92831607
BID	9.610349091	10.27390595
BAD	0.871237587	1.031076343
HIBADH	4.619447054	5.831573799
RBAK	3.625465564	4.094227991
NFKBID	0.507615145	0.826021761
TMBIM1	11.06300514	12.55937229
TMBIM4	0.698516883	0.726849244

Table 5 The FPKM value of the death effector domain-related genes in 143B cells

	BPs	CaBPs-Na <sub>2</sub> FDP@CaCl <sub>2</sub>
DAPK2	0.039610405	0.050644332
DAPK3	32.39997769	33.65422725
DAPK1	1.336393174	1.475661461
DEDD	6.52180196	6.621768914
DEDD2	11.64606321	13.81744192
PIDD1	3.373321553	3.985361011

Table 6 The FPKM value of DNA damage-related genes in 143B cells

	BPs	CaBPs-Na <sub>2</sub> FDP@CaCl <sub>2</sub>
DDB1	21.22568881	23.53925495
DDIT4	15.71234245	20.54947809
DDIT3	15.52556652	35.2735398
DDI2	3.588048769	3.816709679
GADD45B	102.0923154	120.9373459
GADD45G	2.249544669	3.850754505

Table 7 The FPKM value of TNF receptor family-related genes in 143B cells

	BPs	CaBPs-Na <sub>2</sub> FDP@CaCl <sub>2</sub>
TNFRSF9	0.031935655	0.059391555
TNFRSF8	0.035487785	0.065997541

TNFRSF19	0.436555975	0.72576643
TNFRSF14	0.054425264	0.070851239
TNFRSF11B	0.107706558	0.32549504

Table 8 The FPKM values of ATP hydrolysis-related genes in 143B cells

	BPs	CaBPs-Na <sub>2</sub> FDP@CaCl <sub>2</sub>
ATP2B3	0.012922	0.084109
ATP6V1G2	0.062485	0.174307
ATP2A3	0.363074	0.73909
ATP8A1	0.138717	0.269192
ATAD3C	0.084953	0.063196
KIF25	0.0574	0.032024
SWSAP1	0.19859	0.110797
ATP2B2	0.085703	0.042911
SHOC1	0.199465	0.097619
FIGNL2	0.143761	0.053471
CARNS1	0.095435	0.033278
ATP1A3	0.033916	0.010512
RAD50	0.11524	0.035719

Table 9 The FPKM value of osteogenesis-related genes in MC3T3-E1 cells

	BPs	CaBPs-Na <sub>2</sub> FDP@CaCl <sub>2</sub>
Areg	0.121514	0.520924
Wnt3	0.047997	0.102881
Bmp8a	0.920829	1.118469
Bmper	0.840076	3.3067
Bmpr1b	0.049527	0.106159
Bmpr2	5.861905	6.137229
Cebpa	0.364058	0.750334
Col11a2	1.696759	1.979608
Crim1	5.935134	6.769997
Fgf2	0.293886	0.793252
Gdpd2	0.432444	0.549292
Hira	0.938337	1.38754
Hoxa2	0.249532	0.713152
Il6	1.03372	2.183164
Noct	3.026763	3.681851
Osr2	0.061126	0.131022

Prkd1	1.333727	1.537691
Ptger4	0.988261	1.36857
Sema4d	0.182651	0.432718
Sirt7	4.516944	6.147262
Smad1	4.196717	5.19265
Tnfaip6	1.769948	4.163961
Twist2	0.046515	0.24926
Wnt11	0.285501	0.611962
Wnt4	2.816205	4.376429

Table 10 The FPKM value of 143B ATP hydrolysis

	BPs	CaBPs-Na <sub>2</sub> FDP@CaCl <sub>2</sub>
Camta1	0.167196	0.287791
Camta2	5.302208	4.375878
Carhsp1	24.07279	39.97286
Tgif1	10.05261	19.98627
Tgif2	0.134848	0.123876
Smad5	13.15226	12.97618
Smad4	28.21936	30.45682
Smad2	11.14737	11.52356
Smad7	4.049393	5.809836
Smad1	4.196717	5.19265
Nfatc2	0.034893	0.112188
Nfatc3	14.31572	15.8217
Nfatc1	6.57252	5.783496
Runx1	3.892036	8.05298
Runx2	15.0864	14.41389
Runx3	12.08443	11.22763
Crebbp	7.469209	8.285483
Creb1	5.022667	5.210254
Creb3l4	0.395699	0.659687
Creb3l3	0.318189	0.813187
Crebrf	8.88699	10.48527
Crebzf	21.29349	26.97197
Crem	0.450808	0.764982
Plscr3	13.31945	10.32922
Plscr1	7.28603	15.45672
Plscr2	4.31776	6.120237
Plscr4	2.035698	1.145959

Capns1	93.34014	93.7757
Capn1	15.28903	19.10494
Capn10	2.47991	2.639603
Capn9	0.06116	0.163868
Capn5	0.228794	0.40387
Capn15	5.656638	6.200516
Capn12	1.609488	2.172767
Capn3	0.427594	0.824881

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