

Supplementary Figures and Tables

Epigenetic induction of definitive and pancreatic endoderm cell fate in human fibroblasts

Table of contents

Supplementary figure 1. Trichostatin-A (TSA) treatment of BJ foreskin fibroblast induces transient definitive endoderm and pancreatic endoderm markers.....**2**

Supplementary figure 2. 5-azacytidine (5AZA) and Trichostatin-A (TSA) treatment of BJ foreskin fibroblast induces transient definitive endoderm and pancreatic endoderm markers.....**3**

Supplementary figure 3. Comparison of gene expression changes in primary adult fibroblasts treated with TSA-CRM vs. 5AZA-TSA-CRM.....**4**

Supplementary figure 4. Comparison of gene expression changes in BJ1 foreskin fibroblasts treated with TSA-CRM vs. 5AZA-TSA-CRM.....**5**

Supplementary figure 5. 5-azacytidine (5AZA) treatment of primary adult fibroblasts does not induce marker expression.....**6**

Supplementary figure 6. 5-azacytidine (5AZA) treatment of BJ foreskin adult fibroblast does not induces marker expression.....**7**

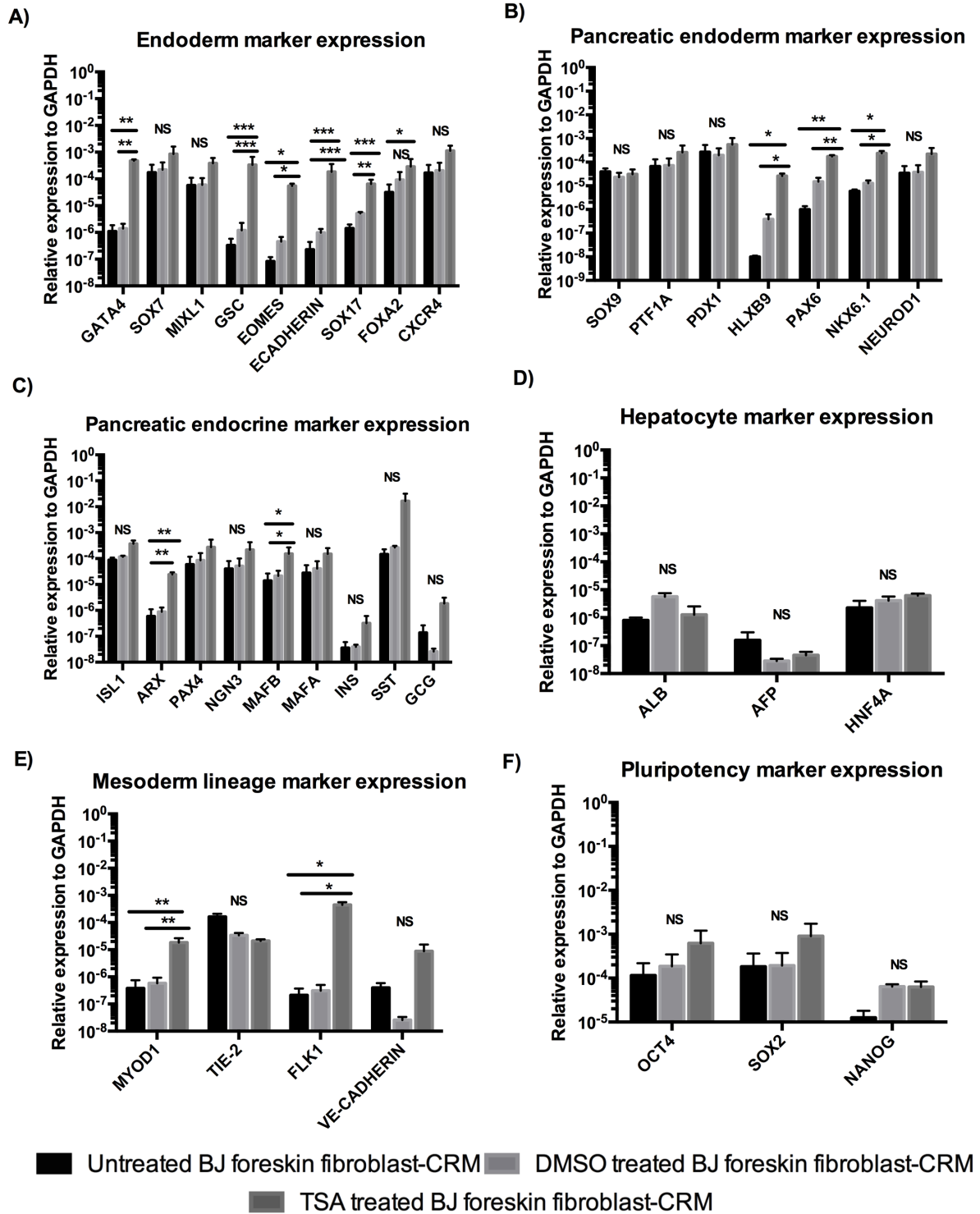
Supplementary table-1

Primers sets used for gene expression analysis by qRT-PCR.....**8**

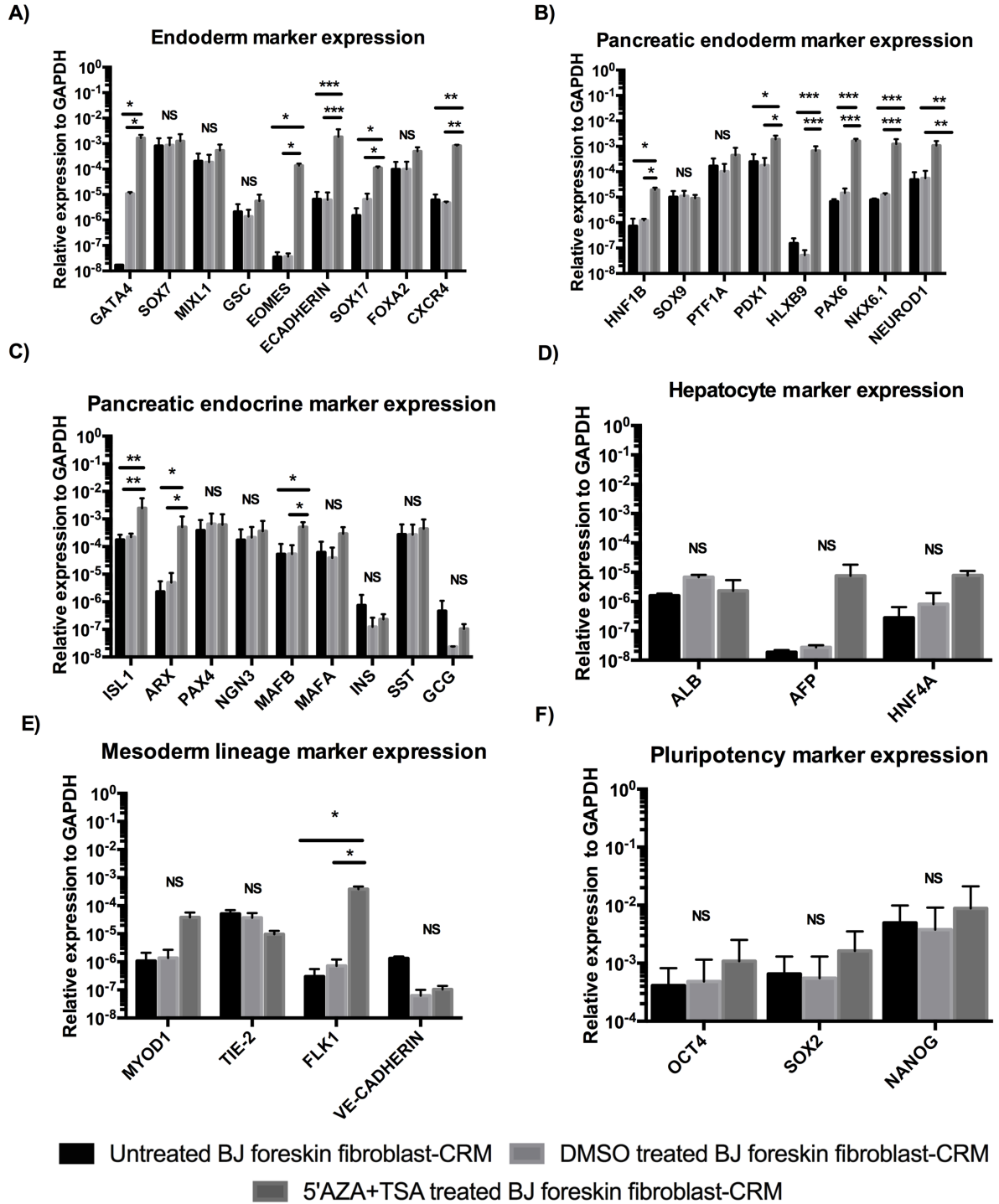
Supplementary table-2

Primers sets used for gene expression analysis by qRT-PCR.....**9**

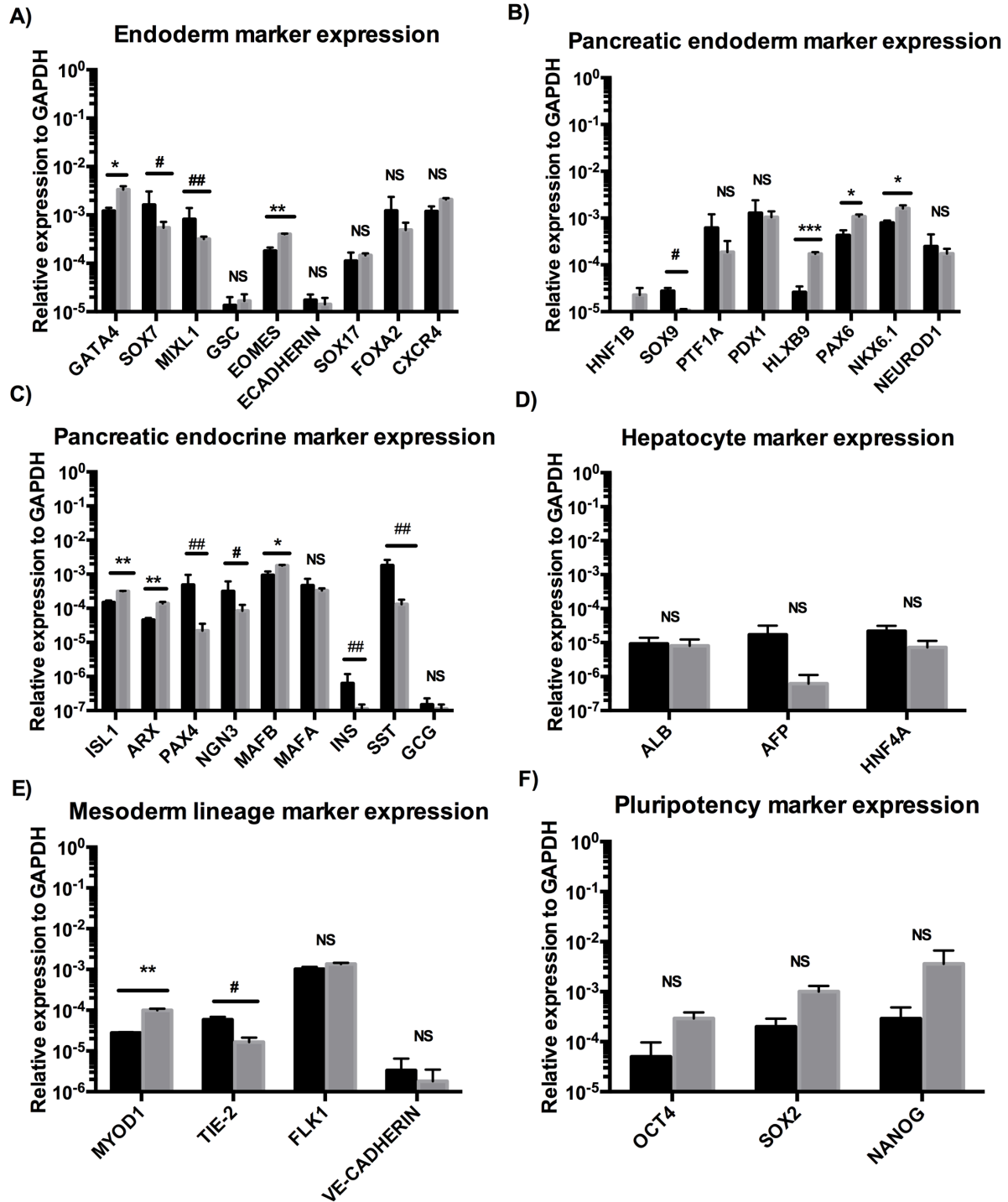
Supplementary figure-1



Supplementary figure-2

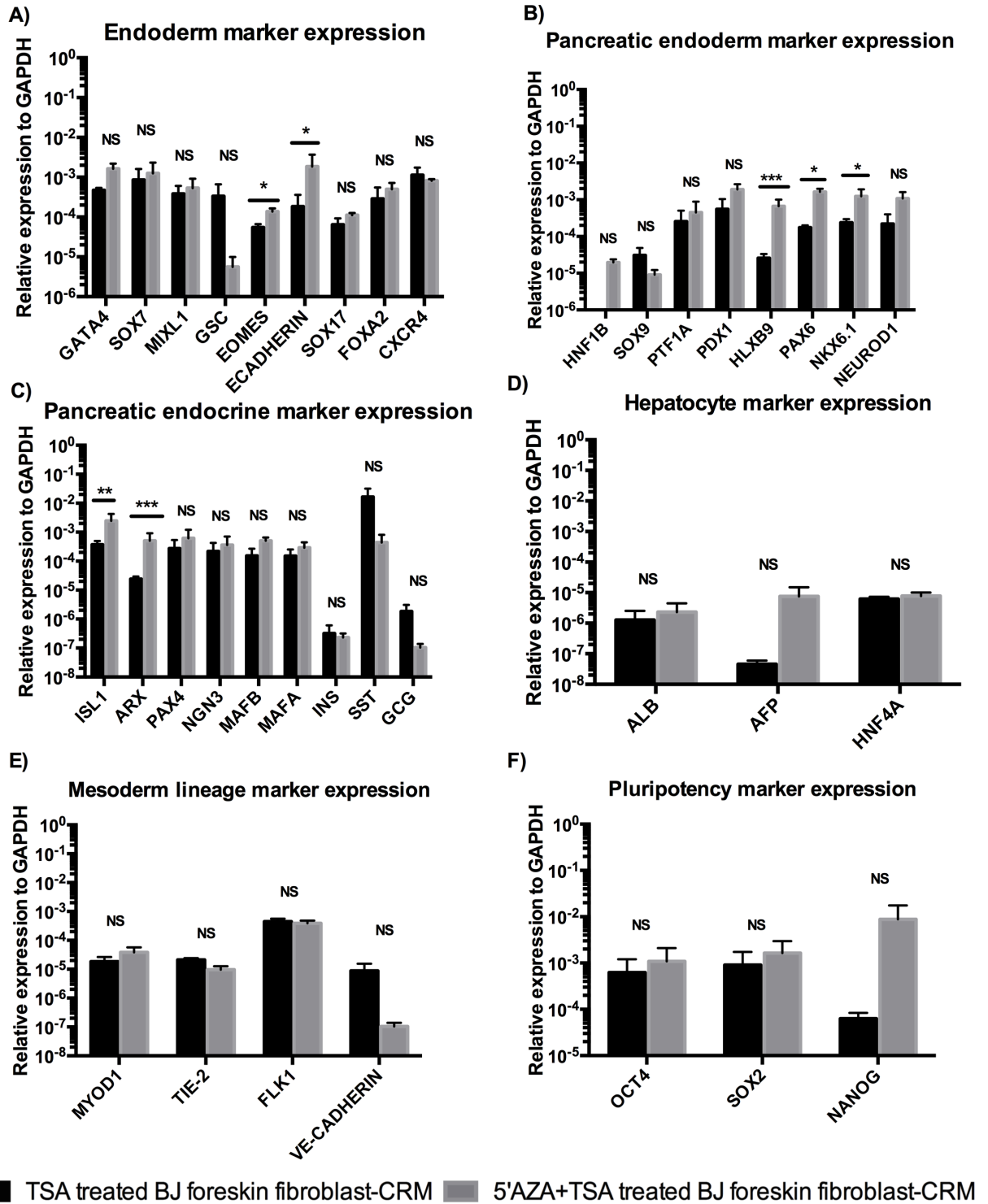


Supplementary figure-3

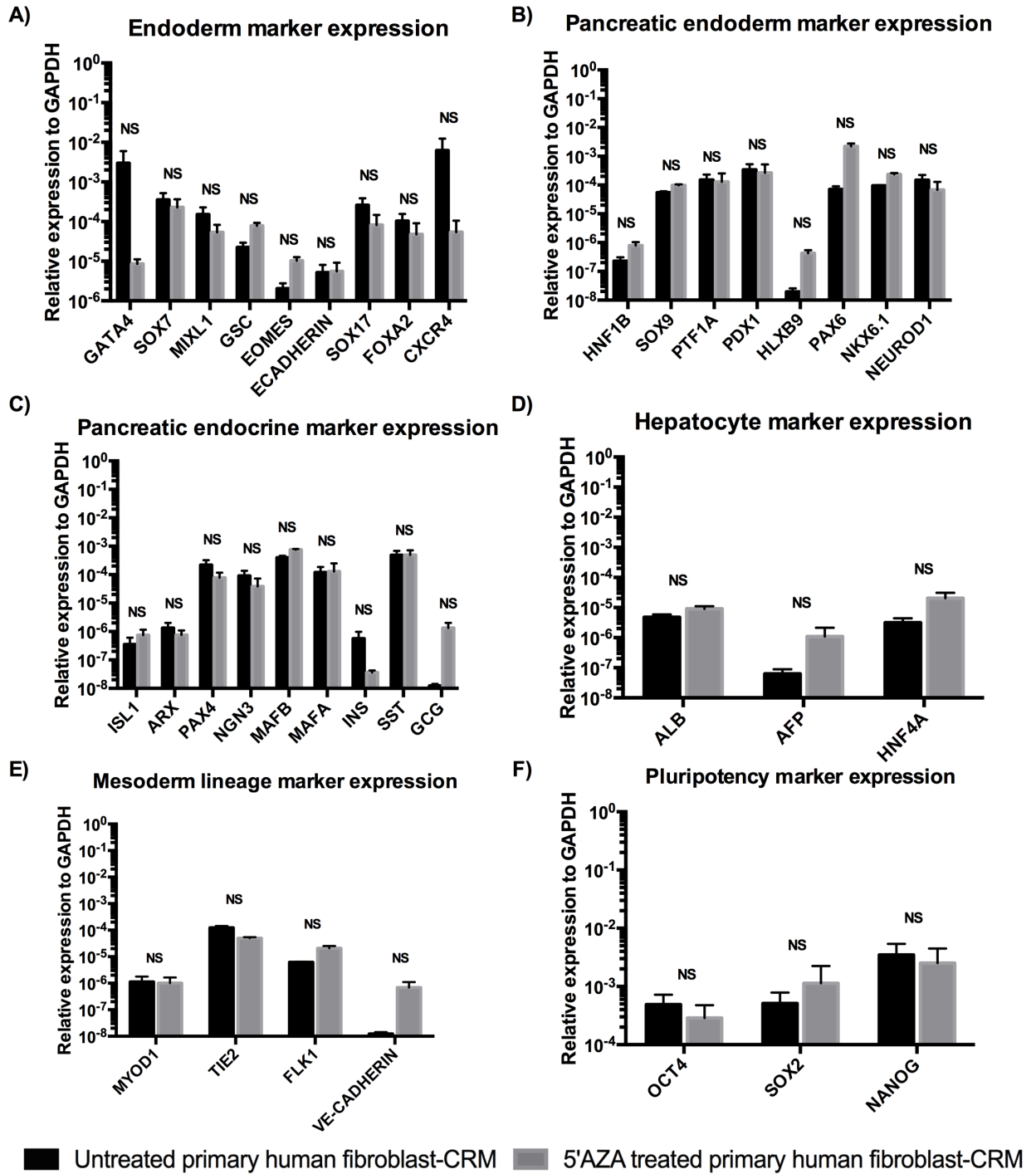


■ TSA treated primary human fibroblast-CRM ■ 5'AZA+TSA treated primary human fibroblast-CRM

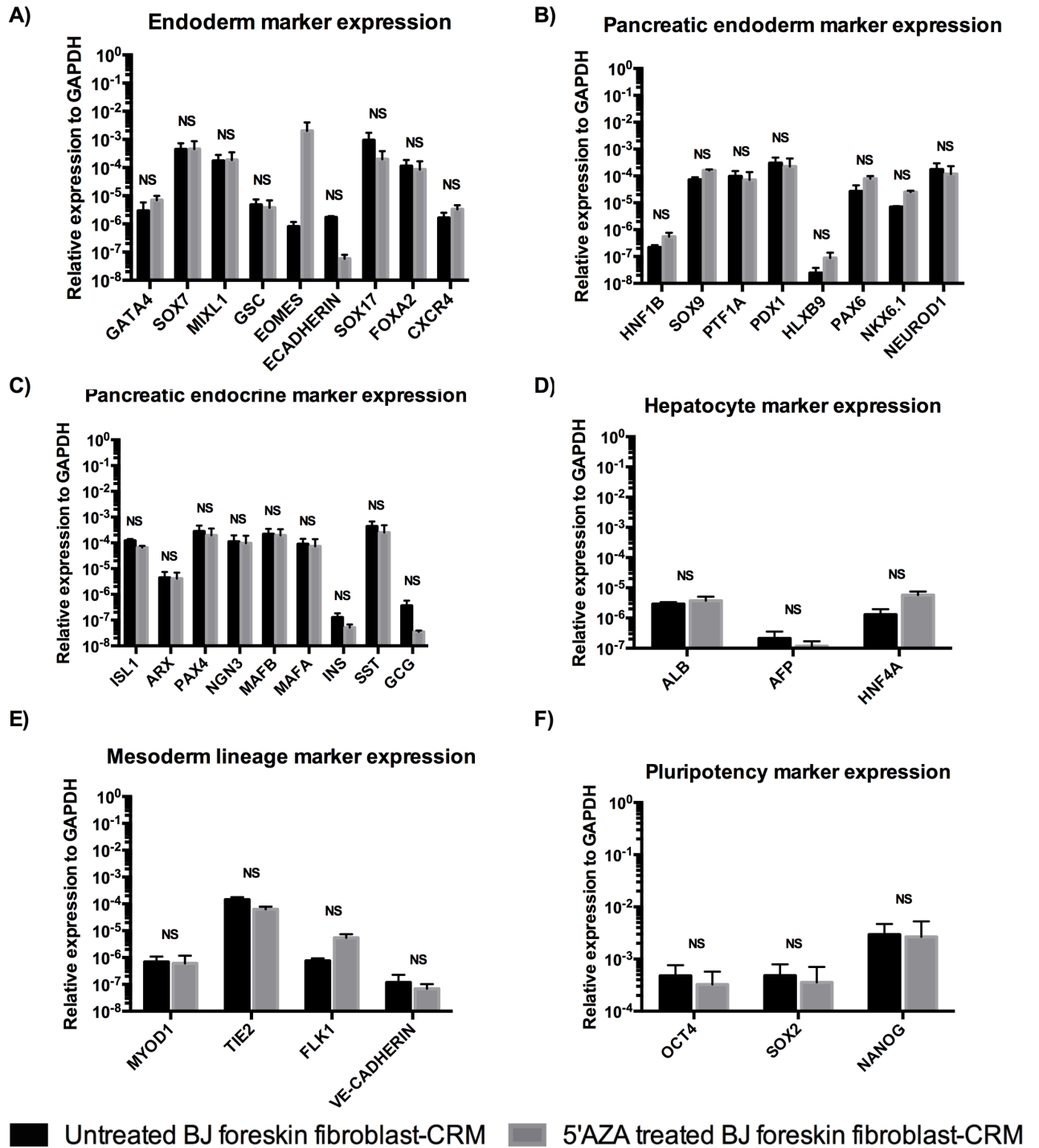
Supplementary figure-4



Supplementary figure-5



Supplementary figure-6



Supplementary table-1

Primers sets used for gene expression analysis by qRT-PCR

Gene	Forward	Reverse
<i>GAPDH</i>	TCAAGAAGGTGGTGAAGCAGG	ACCAGGAAATGAGCTTGACAAA
<i>GATA4</i>	TCCAAACCAGAAAACGGAAG	CTGTGCCCCGTAGTGAGATGA
<i>SOX7</i>	GCCTGTGCAACAAGAGTGAA	GTACCCTGGGTCTTTGGTCA
<i>MIXL1</i>	GGATCCAGGTATGGTTCCAG	CATGAGTCCAGCTTTGAACC
<i>GSC</i>	TCTCAACCAGCTGCACTGTC	CCAGACCTCCACTTTCTCCTC
<i>EOMES</i>	AACAACACCCAGATGATAGTC	TCATAGTTGTCTCTGAAGCCT
<i>ECADHERIN</i>	CGAACTATATTCTTCTGTGAGAGG	GATAGATTCTTGGGTTGGGTC
<i>SOX17</i>	CGCTTTCATGGTGTGGGCTAAGGACG	TAGTTGGGGTGGTCTCTGCATGTGCTG
<i>FOXA2</i>	AGGAGGAAAACGGGAAAGAA	GGTGCTTGAAGAAGCAGGAG
<i>CXCR4</i>	CACCGCATCTGGAGAACCA	GCCCATTTCCTCGGTGTAGTT
<i>HNF1B</i>	TCACAGATACCAGCAGCATCAGT	GGGCATCCCAGGCTTGTA
<i>SOX9</i>	ACGCCATCTTCAAGGCGCTG	CCGGCTGCACGTCGGTTTT
<i>PTF1A</i>	ACGACTTCTTCACCGACCAG	TGGTGGCTAAGGAACTCCAC
<i>PDX1</i>	TCCACCTTGGGACCTGTTTA	GTGTGTTAGGGAGCCTTCCA
<i>HLXB9</i>	ATGATCCTGCCTAAGATGCC	AAATCTTCACCTGGGTCTCG
<i>PAX6</i>	CCCAAGAGCAAATTGAGGCCC	CTCTTCTCCATTTGGCCCTTCGA
<i>NKX6.1</i>	CTTCCCGTCTTTGTCCAACAA	CCATCTTCTGGCCCGGAGTGA
<i>NEUROD1</i>	TAAGACGCAGAAGCTGTCCA	CTGCTCAGGCAGAAAAGTCC
<i>ISL1</i>	GTACAACCACCATTTCACTG	CCCGTACAACCTGATATAATCTC
<i>ARX</i>	ACAGCGTGTGCCTCTCTGC	TCGGGCCTCGGTCAAGTCC
<i>PAX4</i>	CAACCGAGTCCTGCGGGCAT	GCCAGCTTTCACGGGCCAC

Supplementary table-2

Primers sets used for gene expression analysis by qRT-PCR

Gene	Forward primer (5'-3')	Reverse primer (3'-5')
<i>NGN3</i>	TCTCTATTCTTTTGCGCCGG	CTTGGACAGTGGGCGCAC
<i>MAFB</i>	GCCTGCGCTAATTGTAGGAG	CAAAAGCAGGGAAAGAAACG
<i>MAFA</i>	TCATCCGGCTCAAGCAGAAG	TCTCGCTCTCCAGAATGTGC
<i>INS</i>	ATCAAGCACATCACTGTCCT	TGTAGAAGAAGCCTCGTTCC
<i>SST</i>	GAGGCTTGAGCTGCAGAGAT	TCGCTGAAGACTTGGAGGAT
<i>GCG</i>	GTTCCCTTCAAGACACAGAG	GGCAATGTTATTCCTGTTCC
<i>MYOD1</i>	CGACGGCATGATGGACTACA	TAGTAGGCGCCTTCGTAGCA
<i>TIE2</i>	TGCCCAGATATTGGTGTCT	CTCATAAAGCGTGGTATTCACGTA
<i>FLK1</i>	ACAACCAGACGGACAGTGGT	AGCCTTCAGATGCCACAGAC
<i>VE-CADHERIN</i>	G TTCACGCATCGGTTGTTC	TCTGCATCCACTGCTGTCA
<i>ALB</i>	ATGCTGAGGCAAAGGATGTC	AGCAGCAGCACGACAGAGTA
<i>AFP</i>	TGAGCACTGTTGCAGAGGAG	GTGGTCAGTTTGCAGCATTC
<i>HNF4A</i>	ACTACGGTGCCTCGAGCTGT	GGCACTGGTTCCTCTTGTCT
<i>OCT4</i>	GATGGCGTACTGTGGGCCC	TGGGACTCCTCCGGGTTTTG
<i>SOX2</i>	TGGCGAACCATCTCTGTGGT	CCAACGGTGTCAACCTGCAT
<i>NANOG</i>	CCTGTGATTTGTGGGCCTG	GACAGTCTCCGTGTGAGGCAT