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# Supplementary Materials for

## Brx Mediates the Response of Lymphocytes to Osmotic Stress Through the Activation of NFAT5

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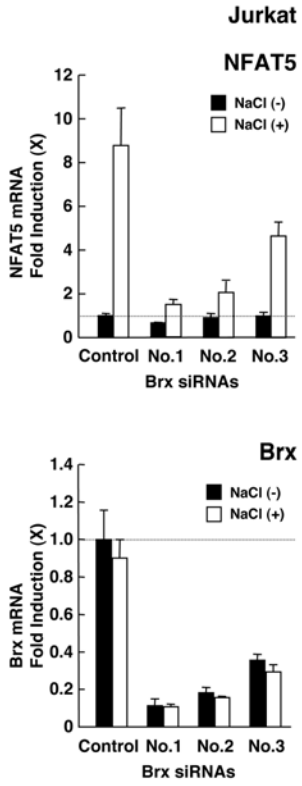


**Fig. S1.** Brx-specific siRNAs suppress the expression of *brx* mRNA and attenuate osmotic stimulus–induced expression of *nfat5* mRNA in Jurkat cells. Jurkat cells were transfected with control or Brx-specific siRNAs and incubated with 100 mM NaCl. Data shown represent the mean fold-difference ± SEM in the expression of *nfat5* (top panel) and *brx* (bottom panel) mRNAs compared to baseline (which was obtained from cells transfected with control siRNA and incubated in the absence of NaCl). Sequences of Brx-specific siRNAs used are: No. 1: 5'-AAAGCCAGAGGAAGAGCAUUUdTdT-3' (which targets nucleotides 219 to 239 of the human *brx* coding region); No. 2: 5'-AGGAAGAUUUGAAACGGAAdTdT-3' (nucleotides 2682 to 2691); and No. 3: 5'-CAGUGAUCUCUUUAAAGAAdTdT-3' (nucleotides 2514 to 2533).

**Table S1.** Primer pairs used in real-time RT-PCR assays.

| Gene Name | | Primer Sequence |
|---|---|---|
| **Mouse Genes** | | |
| AQP2 | Forward | 5'-CATCCTCCATGAGATTACC-3' |
| | Reverse | 5'-CTGCATGGTCAGGAAGAG-3' |
| AR | Forward | 5'-GCAGGATCTCTTCATTGTC-3' |
| | Reverse | 5'-GTAGAGATCCAGGTAGTC-3' |
| ATA2 | Forward | 5'-CGATAACCATGCAGAACATTGG-3' |
| | Reverse | 5'-CAGAAGGACCAGATAGTC-3' |
| BAFF | Forward | 5'-CATTTGTTCCATGGCTTCTC-3' |
| | Reverse | 5'-GCAAAGATGGGGTCCGTGTATAG-3' |
| BGT1 | Forward | 5'-CAACAAGTACCACAACAACTG-3' |
| | Reverse | 5'-CTCAGCCACTTCAGAAATGG-3' |
| Brx | Forward | 5'-GAGCCTGGTGAAGGATGTG-3' |
| | Reverse | 5'-GTCCTCCTTGGCGAACATCTG-3' |
| NFAT1 | Forward | 5'-GATCCCCTCCAAGATATGG-3' |
| | Reverse | 5'-CACATGGCCCCAGGAACTC-3' |
| NFAT2 | Forward | 5'-GGTAACACCACCCAGTATACC-3' |
| | Reverse | 5'-CTCCAGTGCTGTCTTTGC-3' |
| NFAT3 | Forward | 5'-GCTTCGAAATTCAGACATTGAG-3' |
| | Reverse | 5'-CACTCGATGGGCACTGATG-3' |
| NFAT4 | Forward | 5'-CCAGTGGAAAAGTTCTTTCTC-3' |
| | Reverse | 5'- CCAGTCACAATCATTTCG-3' |
| NFAT5 | Forward | 5'-CAGAGCTGCAGTATGTG-3' |
| | Reverse | 5'-CCTCTGCTTTGGATTTCG-3' |
| NFκB RelA (p65) | Forward | 5'-GACATTGAGGTGTATTTCAC-3' |
| | Reverse | 5'-GAGGAGTCCGGAACACAATGG-3' |
| NFκB p105 (p50) | Forward | 5'-GTGGGGCCTGCAAAGGTTATCG-3' |
| | Reverse | 5'-CTGCTGTTACGGTGCATACC-3' |
| Osp94 | Forward | 5'-CCAAGAATTGGAAACTTCAC-3' |
| | Reverse | 5'-CAGATTCTGCTTCTCAATTACTG-3' |
| RPLP0 | Forward | 5'-GAGGACCTCACTGAGATTCG-3' |
| | Reverse | 5'-CTGGAAGAAGGAGGTCTTCTC-3' |
| SMIT | Forward | 5'-GCAGACTAAGGTCAAGTC-3' |
| | Reverse | 5'-CTCCTTGGAGCGGAACTG-3' |
| TauT | Forward | 5'-GCATCCATCGTCATTGTG-3' |
| | Reverse | 5'-CACATGGCCCCAGGAACTC-3' |
| TNFα | Forward | 5'-CACGCTCTTCTGTCTACTG-3' |
| | Reverse | 5'-GTGGGCTACAGGCTTGTC-3' |
| **Human Genes** | | |
| AR | Forward | 5'-CTGGACCTCTACCTTATTCAC-3' |
| | Reverse | 5'-CTTCATCCACCAGCTCTTC-3' |
| BAFF | Forward | 5'-CTTGTTCCAGTTAACATTACC-3' |
| | Reverse | 5'-CAGGACCTGACTATAGAG-3' |

| | | |
|---|---|---|
| Brx | Forward | 5’-CAGTGATGACATGGACAG-3’ |
| | Reverse | 5’-TCGGTGGATGAACTGGATC-3’ |
| HSP70-2 | Forward | 5’-CACAGCGCGGTCATAACG-3’ |
| | Reverse | 5’-GATGATGCGCAGCACATTGAG-3’ |
| NFAT5 | Forward | 5’-CTGATGACTCCACTCATACC-3’ |
| | Reverse | 5’-GTTTGCTGAGTTGATCCAACAG-3’ |
| p38 MAPKα | Forward | 5’-GTCTGTTGGACGTTTTTACAC-3’ |
| | Reverse | 5’-GAACATGGTCATCTGTAAGC-3’ |
| RPLP0 | Forward | 5’-CGCGACCTGGAAGTCCAACT-3’ |
| | Reverse | 5’-CCATCAGCACCACAGCCTTC-3’ |
| Vav1 | Forward | 5’-CAAGATGGACAGGTATGC-3’ |
| | Reverse | 5’-GCTCCACTTCTTGTTGTC-3’ |