

**Cellular Heat Shock Factor 1 Positively Regulates Human Immunodeficiency Virus-1
Gene Expression and Replication by Two Distinct Pathways**

Pratima Rawat and Debashis Mitra*

SUPPLEMENTARY INFORMATION

Table S1: Primers used in RT-PCR

Primer		Primer Sequence
human β Actin	forward	5' TGACGGGGTTCACCCACACTGTGCCCATCTA3'
human β Actin	reverse	5' CTAGAAGCATTTGCCGTGGACGATGGAGGG3'
human HSP40	forward	5' CAGGATCCATGGTGGATTACTATGAAG3'
human HSP40	reverse	5' GTGGAAGAGAATGAAGTGAGG3'

Table S2: Primers used in HSP40 promoter mutagenesis

Mutation site	Primer used in mutagenesis
Sp1 site	5'GCCGAGGGCGGAGCGTTATTTGCGTGGCCCCGCGC3'
CAAT Box	5'GAAAGGGCGGCGGCGTCAGGCCGGCGCCGCGGG 3'
First HSE	5'GGGCGGGCGGGGCGTCTGGTTCTGGAGGGGGCTGG3'
Second HSE	5'GGGCTGGCGGGCTCTGTCTGCTTCCGCCGGACGGG 3'

Table S3: Primers used in EMSA

Probes	Sequence (5' to 3')
P1 (Both NFkb sites of LTR B)	GGGACTTTCGCTGGGGACTTTCC
P2 (NFkB and 3 rd Sp1 site from TATA box)	GGGACTTTC CAGGGA GGT GTGGC
P3 (1 st and 2 nd Sp1 site from TATA box)	TGGGCGGGA CTGGGGAGTGGCG
P4 (2 nd and 3 rd Sp1 site from TATA box)	GGGAGGTGTGGCCTGGGCGGGAC

Table S4: Primers used in HSP40 promoter ChIP

Primer	Sequence
F1 (Fwd)	5' GTGGTACCCTCCTCCGACCTGTG3'
F2 (Fwd)	5' TAGGTACCGGGCGGAAGGTTCT3'
R1 (Rev)	5' TACTCGAGACCCCTCCTGCG3'
R2 (Rev)	5' TACTCGAGCGCCGCCCTTT 3'

Table S5: Primers used in LTR ChIP

Primer	Sequence
F1 (Forward)	GGAGTACTACAAAGACTGCT
F2 (Forward)	TGGGGACTTTCCAGGGAG
F3 (Forward)	GGCGGGACTGGGGAGTGG
R (Reverse)	TAACCAGAGAGACCCAGTA

Table S6: Primers used in QRT-PCR

Primer		Primer Sequence
human GAPDH	forward	5'GAAGGTGAAGGTCGGAGTC3'
human GAPDH	reverse	5'GAAGATGGTGATGGGATTTC3'
human HSF1	forward	5' GCCTTCCTGACCAAGCTGT3'
human HSF1	reverse	5' AAGTACTTGGGCAGCACCTC3'