



SUPPLEMENTARY ONLINE DATA

Holocarboxylase synthetase interacts physically with nuclear receptor co-repressor, histone deacetylase 1 and a novel splicing variant of histone deacetylase 1 to repress repeats

Dandan LIU* and Janos ZEMPLENI*¹

*Department of Nutrition and Health Sciences, Ruth Leverton Hall, University of Nebraska-Lincoln, Lincoln, NE 68583-0806, U.S.A.

Supplementary Table S1 can be found on the next page.

¹ To whom correspondence should be addressed (email JZEMPLENI2@UNL.EDU).

Table S1 PCR primers used in the present study

GenBank® entries: CDK3 = cyclin-dependent kinase 3 (NM_001261); Chr1alpha = chromosome 1 alpha satellite repeats (M26919); Chr4alpha = chromosome 4 alpha satellite repeats (M38467); GAPDH = glyceraldehyde-3-phosphate dehydrogenase (NG_007073 for genomic DNA and NM_002046 for complementary DNA); HDAC1 = histone deacetylase 1 (NM_004964); HLCS = holocarboxylase synthetase (NM_000411); LTR15 = intact LTR (AC116309); LTR22 = solitary LTR (AL451165); MDM2 = E3 ubiquitin-protein ligase MDM2 (NM_002392); N-CoR = nuclear receptor corepressor (NM_006311); TP53 = tumour protein p53 (NM_000546). F, forward; gDNA, genomic DNA; P, primer pair; R, reverse; R-U5 = region between R and U5 of LTR of HERV-K families; U5 = U5 region of LTR of HERV-K families.

P	Target; template	Primer sequences 5→3'	F/R
1	HLCS-NT; cDNA	GCCGAATCCCATGGAAGATAGACTCC CAGGTCGACCCGAAGGCTCCATGTTG	F R
2	HLCS-CD; cDNA	GCCGAATCCCTTTGCCAAGTGACCC CAGGTCGACCCGTCACCTGTAATAATA	F R
3	HLCS-L; cDNA	GCCGAATCCCACCATCTGCATCAACG CAGGTCGACCCGTGGACCCAGTATCGG	F R
4	HLCS-CT; cDNA	GCCGAATCACAGTGGTCAGCAAGTCC CAGGTCGACTCTCAGCATGTCCGAAGGA	F R
5	HLCS; cDNA	GTCCGAATTCGGGAGCATGTTGGCAGAG ATTTCTCGAGCCCGCTTTGGGGAG	F R
6	N-CoR-NT; cDNA	GCGGAATCCCTCAAGTTCAGGTTATCCT GCGGGTACCATCCAAGTCTCTTTCTTTGG	F R
7	N-CoR-CD; cDNA	GCGGAATCCCACCAAAGTCTGACTCTGT GCGGGTACAGCACTTGCAGCAGCTGC	F R
8	N-CoR-CT; cDNA	GCGGAATCCCTGGTACACAGATTACTTT GCGGGTACCGTTCATCACTATCCGACAGG	F R
9	CT _{K2323R} ; cDNA	TCAGGAGGAGTTTGCAGACCAAAGTGTATCAGC TTTGGTCTGCAAACCTCTCTGAATGAGGTGAT	F R
10	CT _{K2325R} ; cDNA	GGAGTTTGCAAACCAAGGCTGATCAGCAAGTCA ATCAGCCTTGTTTGCAAACTCCTCTGAATGA	F R
11	CT _{del} ; cDNA	CCATCACCTCATTCAAGCAAGTCAAACAGC TGCTTGAATGAGGTGATGGGTCCCTTCCT	F R
12	N-CoR-NT; cDNA	GCGGAATTCCTCAAGTTCAGGTTATCCTCC GCGGAGCTCATCCAAGTCTCTTTCTTTGG	F R
13	N-CoR-CD; cDNA	GCGGAATCACCAAAGTCTGACTCTGTGG GCGGAGCTCAGCACTTGCAGCAGCTGC	F R
14	N-CoR-CT; cDNA	GCGGAATCCCTGGTACACAGATTACTTTCC GCGGAGCTCGTTCATCACTATCCGACAGG	F R
15	HDAC1 & Δ31; cDNA	GCGGAATCAAGCGCAGACGCAGGG GCGGGTACCGGCAACTTGACCTCCTCCTTG	F R
16	HDAC1 & Δ31; cDNA	GCGGAATCAAGCGCAGACGCAGGG GCGGAGCTCGGCAACTTGACCTCCTCCTTG	F R
17	NLuc; cDNA	CCCGTCGACCGAAGACGCCAAAAAC CCCGCGGCCGCTCCATCTTTGCAAT	F R
18	CLuc; cDNA	GCGGGCCATGGAGGCCATGTCCGGT GCGGAATTCGCACGGCGATCTTTCCG	F R
19	TP53; cDNA	CGGCCATGGAGCCGAGGAGCCGCAGTCA GCGGTCGACCGTCTGAGTCAGGCCCTTCTGTG	F R
20	MDM2; cDNA	GCGGAATCCCGTGAGGAGCAG GCGCTCGAGAGGGGAATAAGTTAGCA	F R
21	CDK3; cDNA	GCGGAATCCCGATATGTTCCAGAA GCGCTCGAGAATGGCGGAATCGCT	F R
22	LTR15; gDNA	TTGTCATTGGTTCTGTGTAGGG CCTCCATATGCTGAACGCTG	F R
23	LTR22; gDNA	ATGGATTACGCTGTGTCTTTGGG CCTCCATATGCTGAACGCTG	F R
24	GAPDH; gDNA	ATGACAAGCATGAGGCAGAG CAACCAGGACCGTTAACCCCTTTCT	F R
25	HLCS; cDNA	ATGGAAGATAGACTCCACAT TGAGACCTGATCCTTAACCTCC	F R
26	U5; cDNA	AACTCAGAGGCTGGCG AGACACAGAGACAAAGTATAGAGA	F R
27	R-U5; cDNA	GCGGGCAGCAATACTGCTTTGTAA ACCAGCGTTCAGCATATGGAGGAT	F R
28	GAPDH; cDNA	TCCACTGGCGTCTTACC GGCAGAGATGATGACCCTTT	F R
29	Chr1alpha; cDNA, gDNA	CATCGAATGGAATGAAAGGAGTC ACCATTGGATGATTGCAGTCAA	F R
30	Chr4alpha; cDNA, gDNA	CTGCACTACCTGAAGAGGAC GATGGTTCAACACTCTTACA	F R