

**Differential requirement for dimerization partner DP between E2F-dependent activation of tumor suppressor and growth-related genes**

Hideyuki Komori<sup>1</sup>, Yasuko Goto<sup>2</sup>, Kenta Kurayoshi<sup>2</sup>, Eiko Ozono<sup>3</sup>, Ritsuko Iwanaga<sup>4</sup>, Andrew P. Bradford<sup>5</sup>, Keigo Araki<sup>2</sup> and Kiyoshi Ohtani<sup>2</sup>

<sup>1</sup>Life Sciences Institute, University of Michigan,  
210 Washtenaw Avenue, Ann Arbor, MI 48109-2216, USA

<sup>2</sup>Department of Biomedical Chemistry, School of Science and Technology,  
Kwansei Gakuin University,  
2-1 Gakuen, Sanda, Hyogo, 669-1337, Japan

<sup>3</sup>Chromosome Replication Lab, The Francis Crick Institute,  
Midland Road, NW1 1AT, UK

<sup>4</sup>Department of Craniofacial Biology,  
University of Colorado School of Dental Medicine, Anschutz Medical Campus,  
12801 East 17th Avenue, Aurora, CO 80045, USA

<sup>5</sup>Department of Obstetrics and Gynecology,  
University of Colorado School of Medicine, Anschutz Medical Campus,  
12800 East 19th Avenue, Aurora, CO 80045, USA

*Correspondence:*

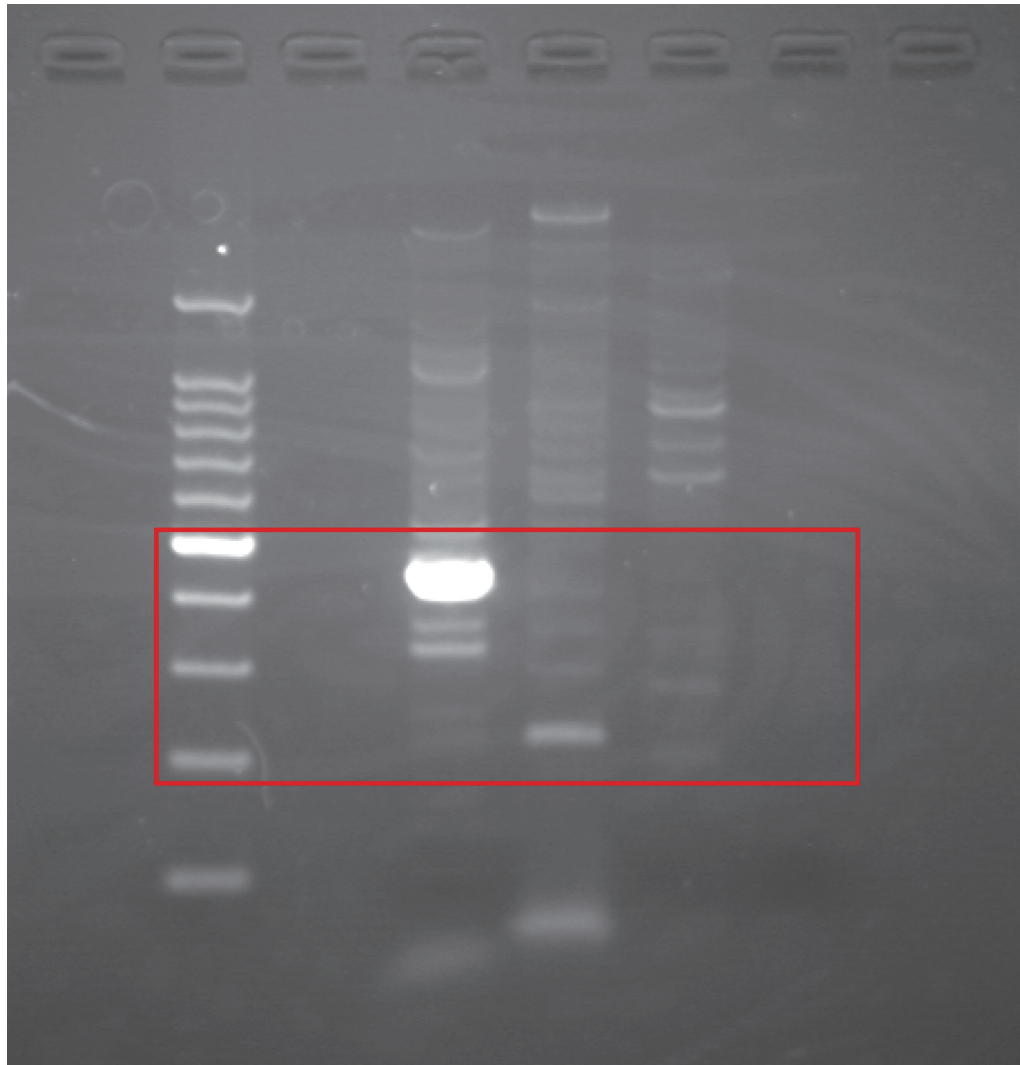
Kiyoshi Ohtani

Department of Biomedical Chemistry, School of Science and Technology,  
Kwansei Gakuin University,  
2-1 Gakuen, Sanda, Hyogo, 669-1337, Japan

Phone: +81-79-565-7219

Fax: +81-3-79-565-7219

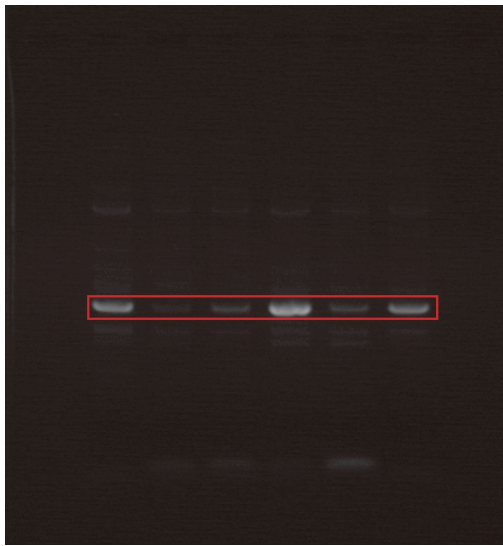
E-mail: btm88939@kwansei.ac.jp



Supplementary Figure S1

Full-length gel of PCR products illustrated in Figure 1(A).

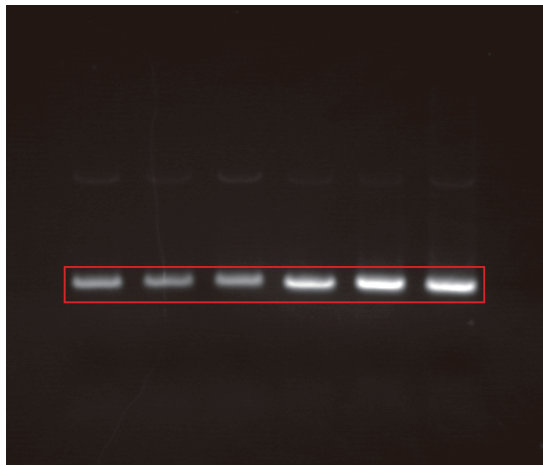




*DP1*



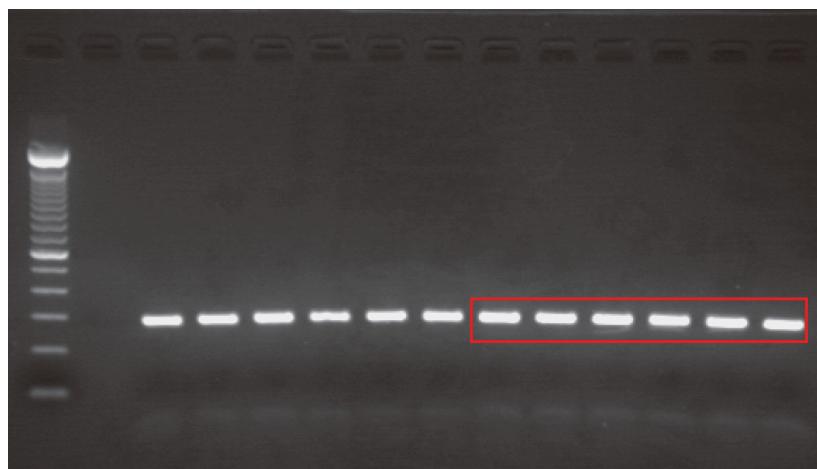
*CDC6*



*ARF*



*Bax*



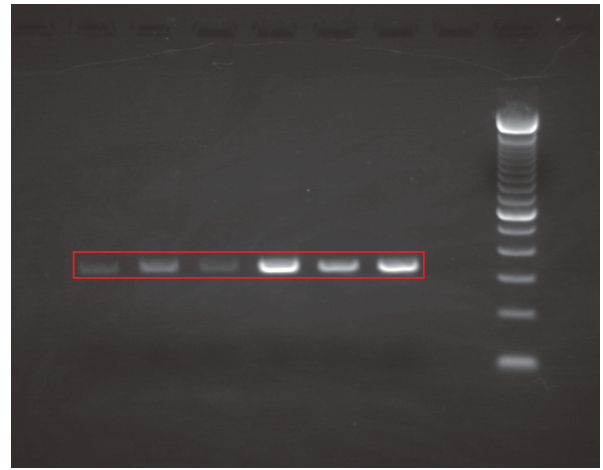
*GAPDH*

Supplementary Figure S2

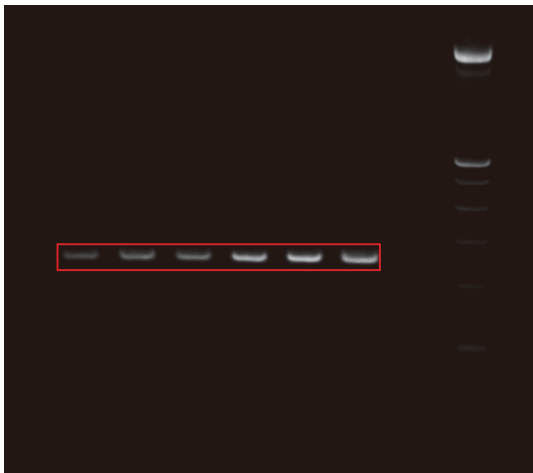
Full-length gels of indicated PCR products illustrated in Figure 1(C).



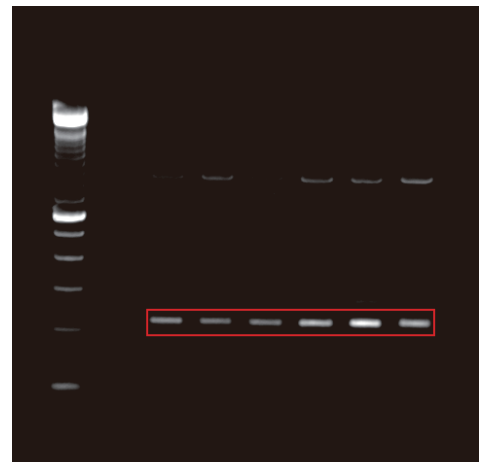
*DP1*



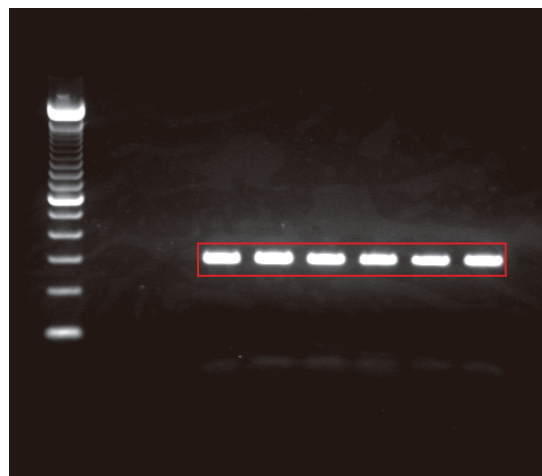
*CDC6*



*ARF*



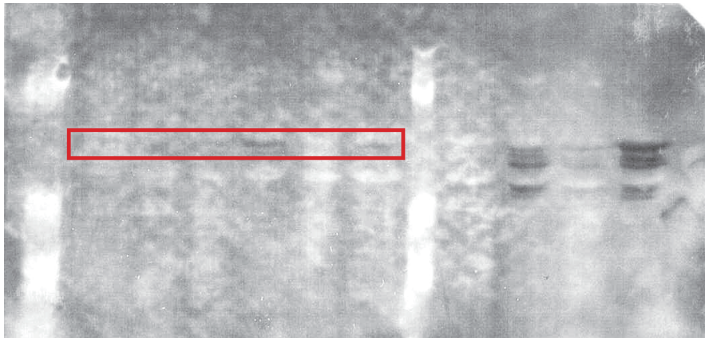
*Bax*



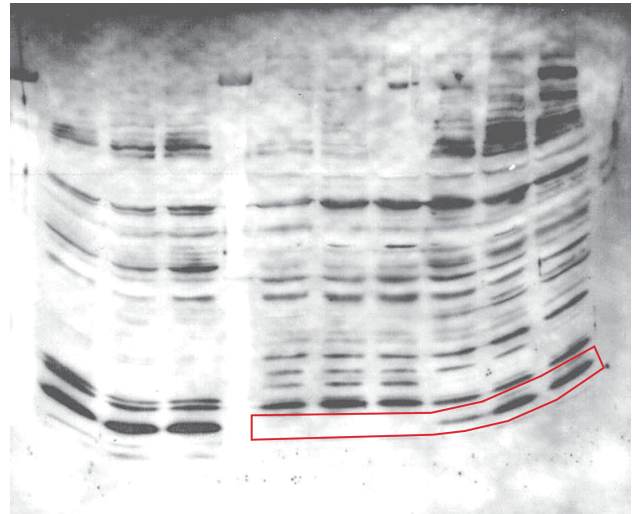
*GAPDH*

Supplementary Figure S3

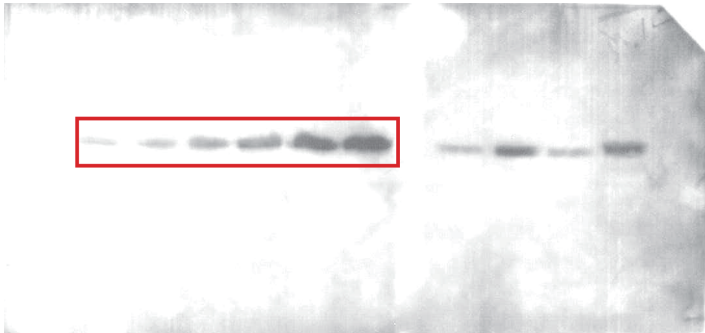
Full-length gels of indicated PCR products illustrated in Figure 1(D).



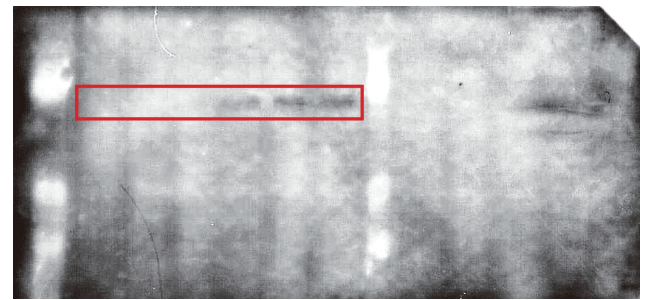
DP1



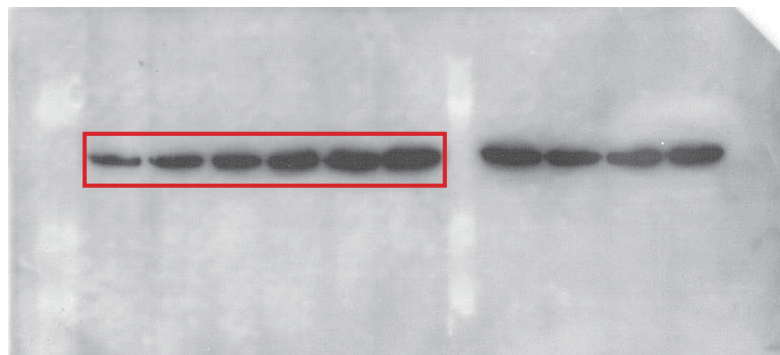
ARF



p53



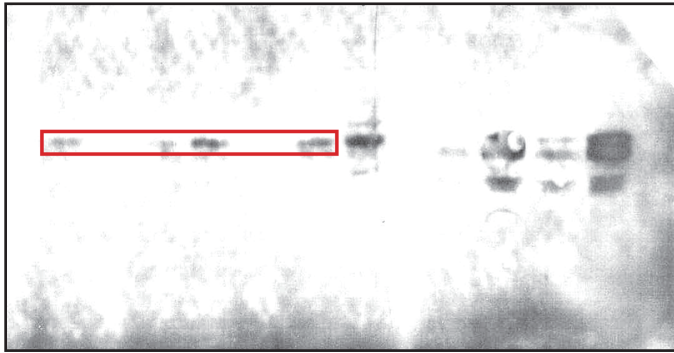
E2F1



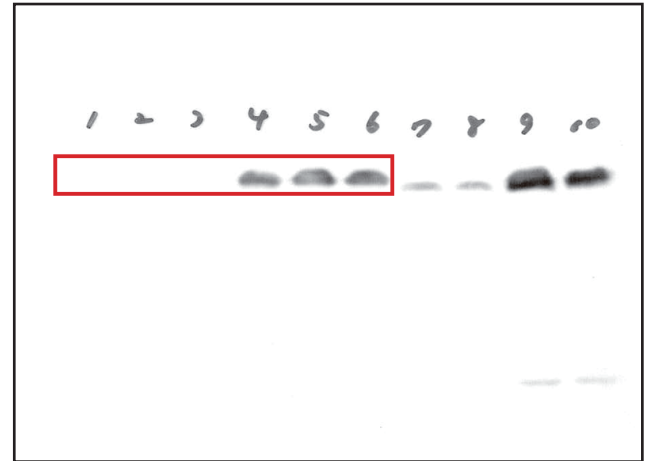
$\alpha$ -tubulin

Supplementary Figure S4

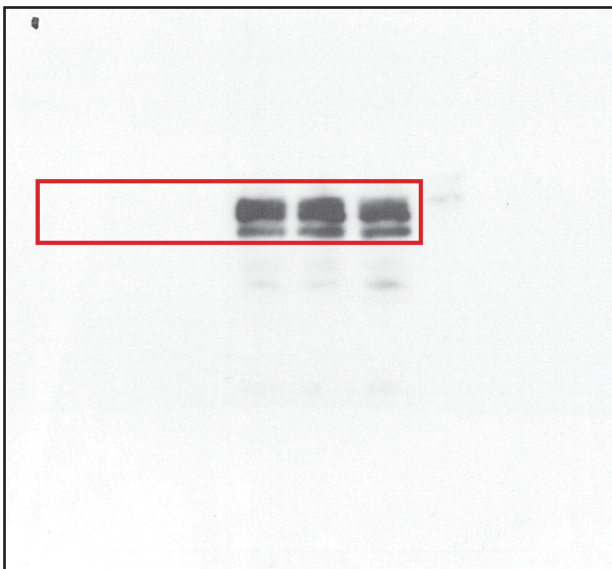
Full-length blots of indicated proteins illustrated in Figure 1(E).



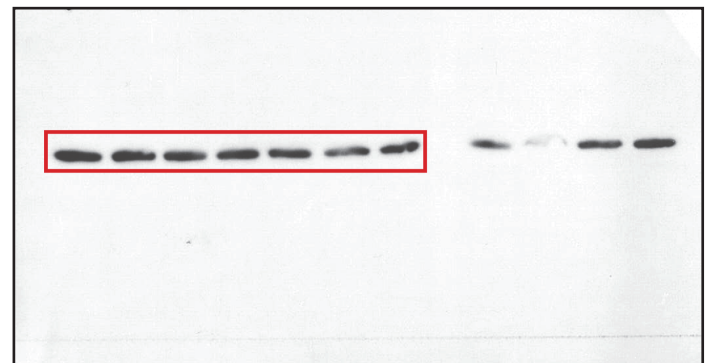
DP1



p53



E1a

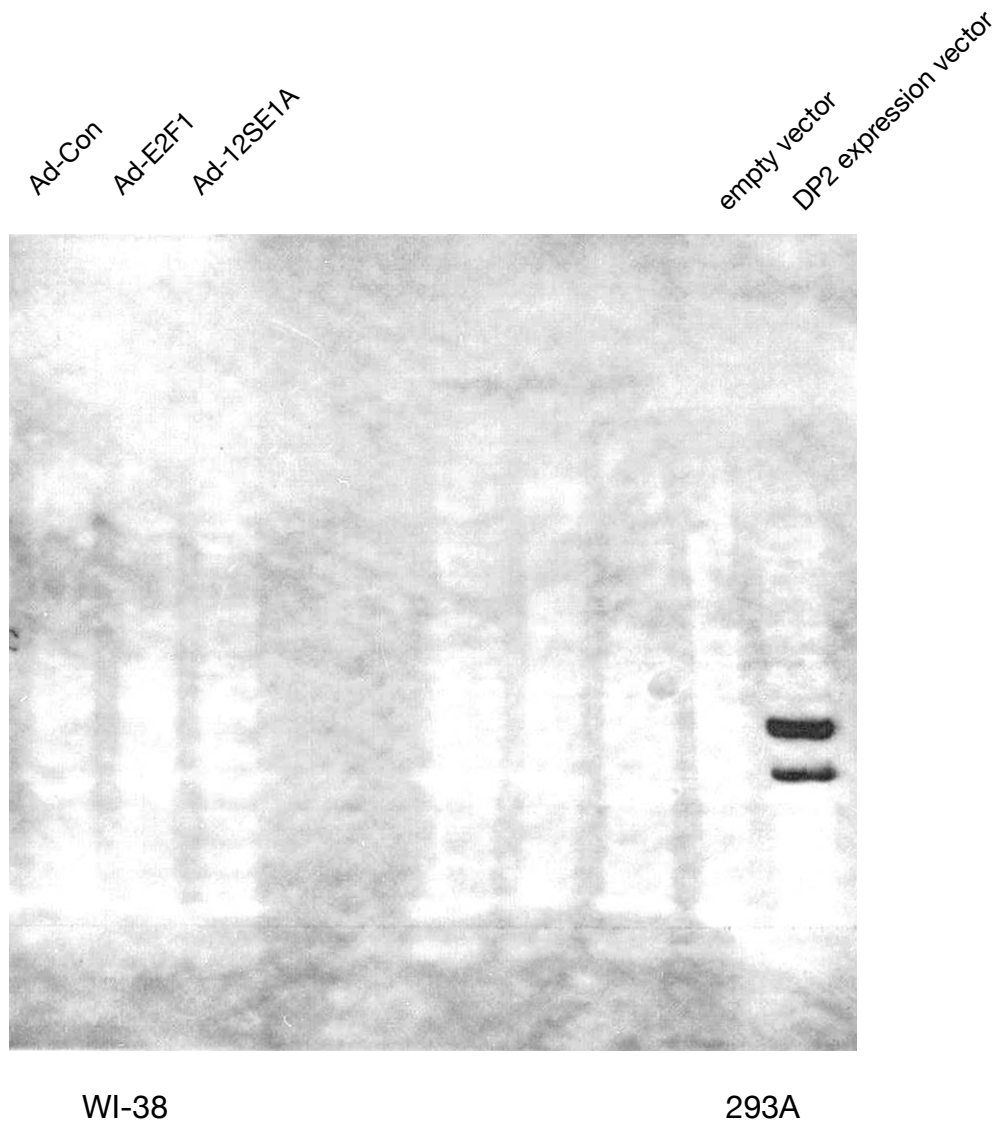
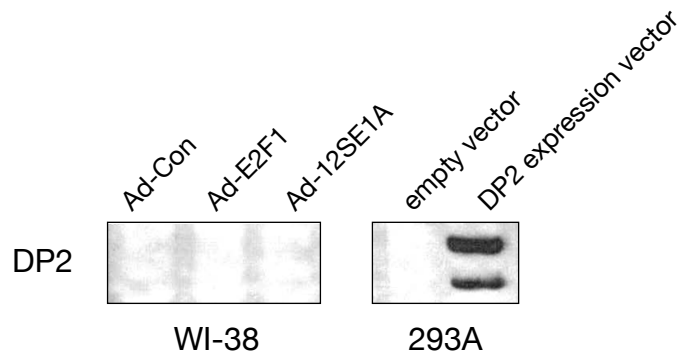


$\alpha$ -tubulin

Supplementary Figure S5

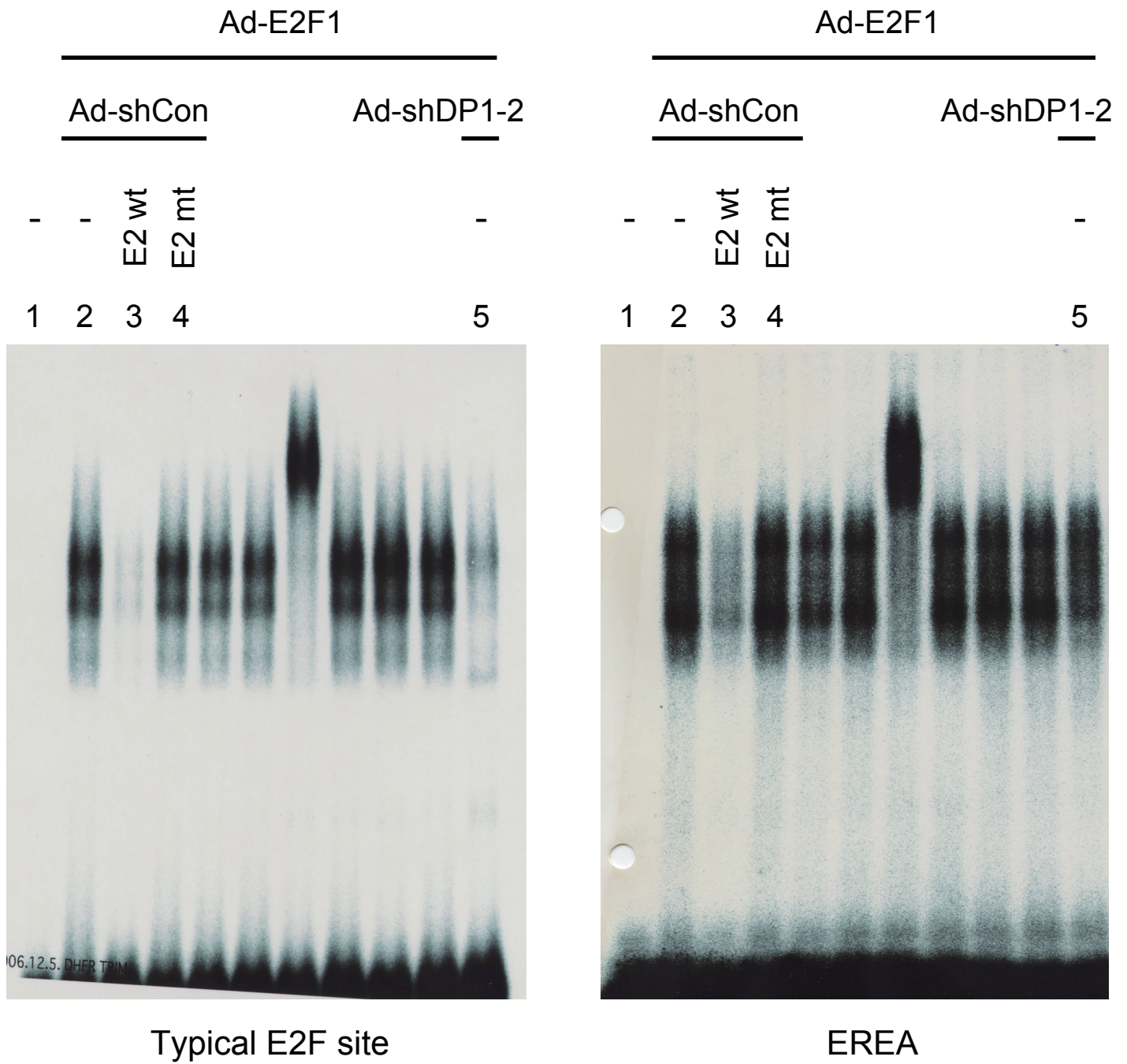
Full-length blots of indicated proteins illustrated in Figure 1(F).





### Supplementary Figure S6

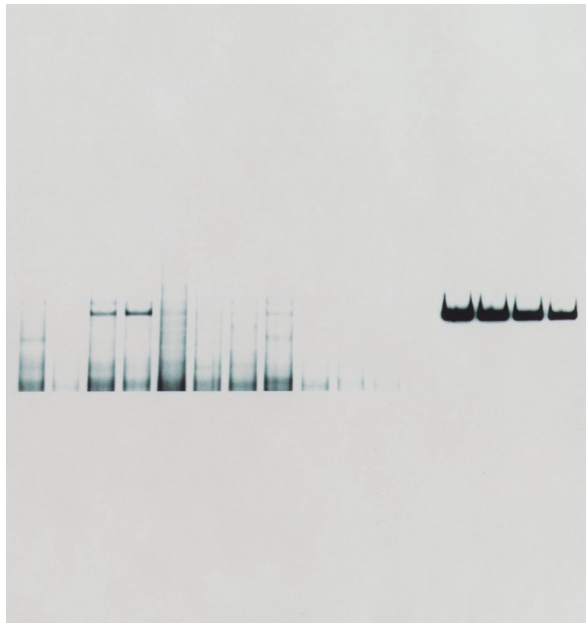
Expression of DP2 protein was not detected by immunoblot analysis even with ectopic expression of E2F1 or E1a. Lower panel is full-length blot of upper panel.



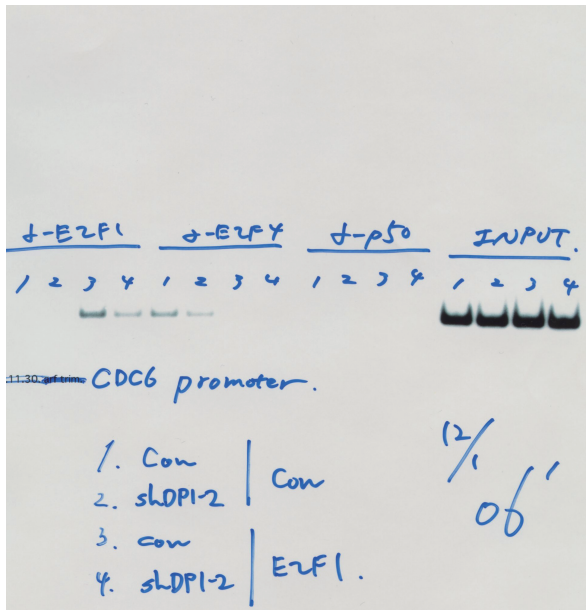
Supplementary Figure S7

Full-length gels of gel mobility shift assays illustrated in Figure 2 (B).

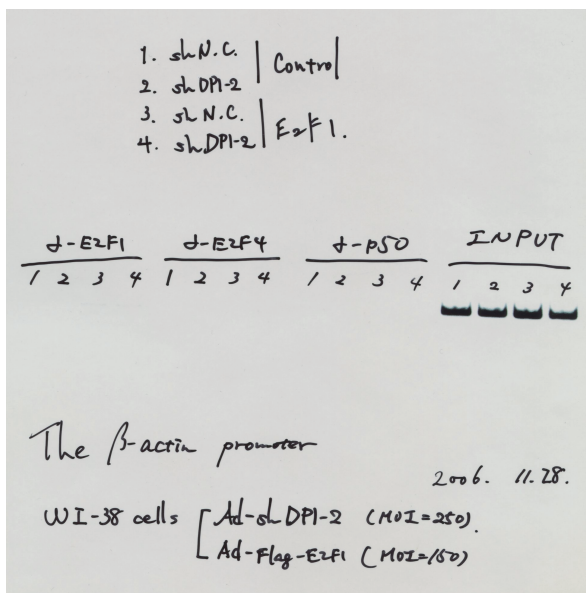
ARF



CDC6



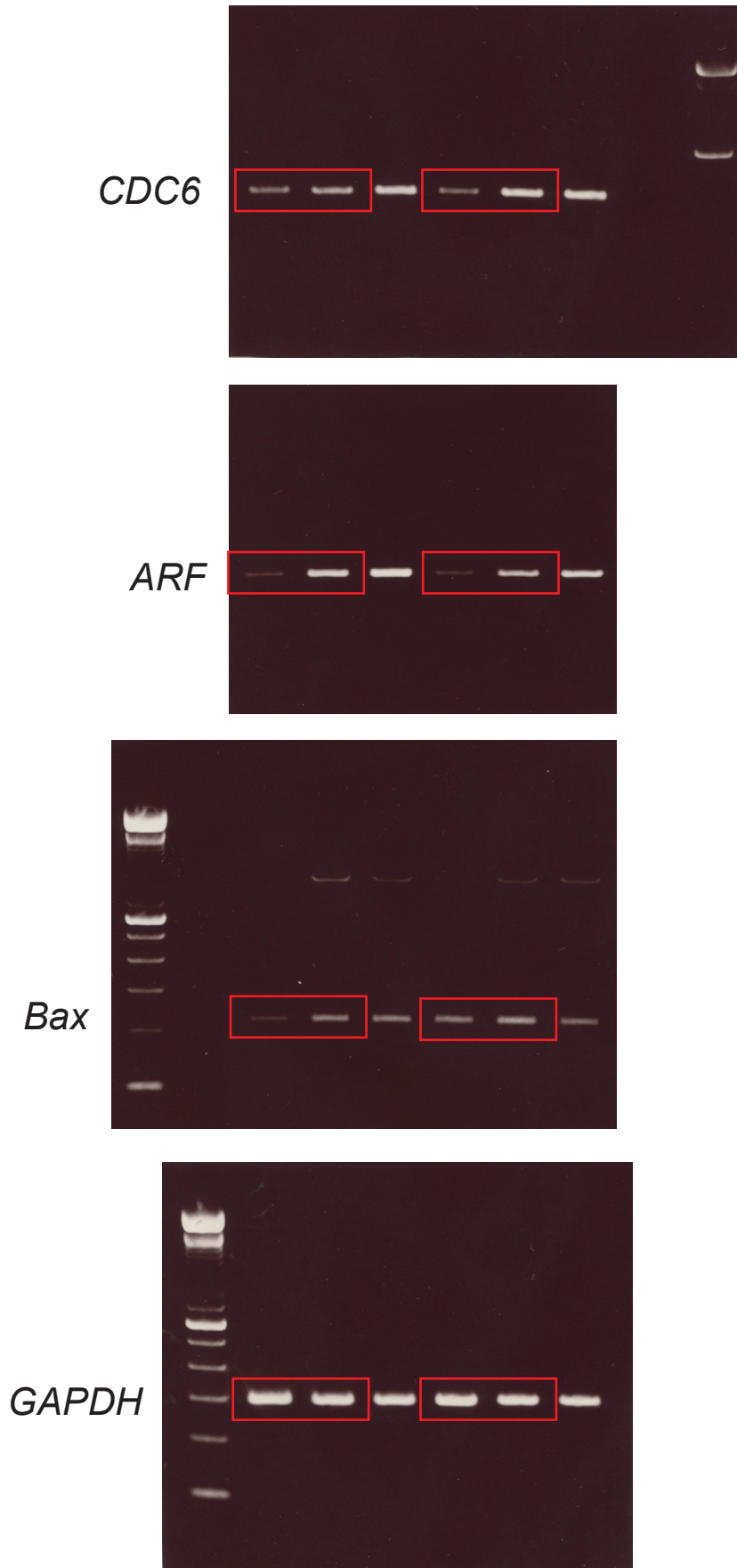
β-actin



Supplementary Figure S8

Full-length gels of ChIP analysis illustrated in Figure 2(C).

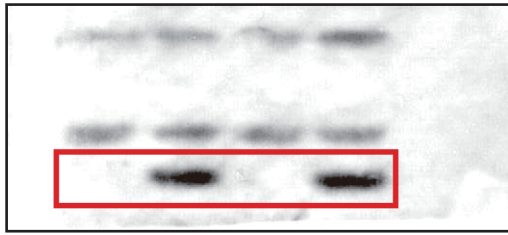
Ad-E2F1	-	+	-	+
Ad-DP1	-	-	+	+



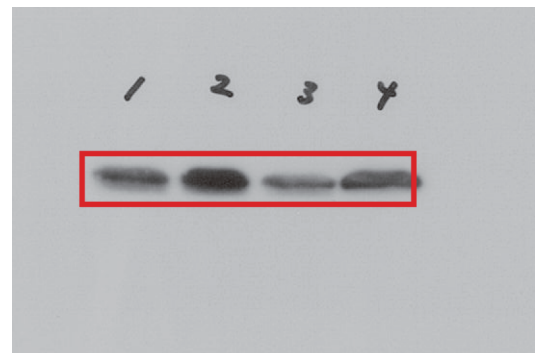
Supplementary Figure S9

Full-length gels of indicated PCR products illustrated in Figure 3(A).

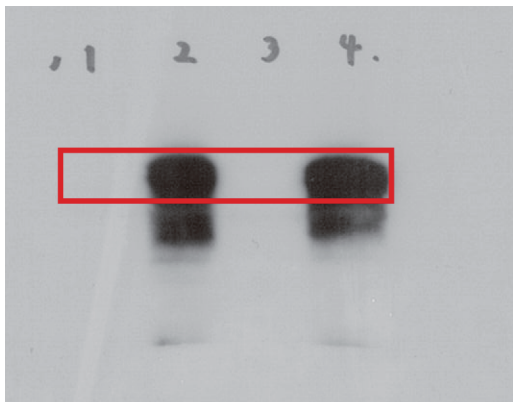




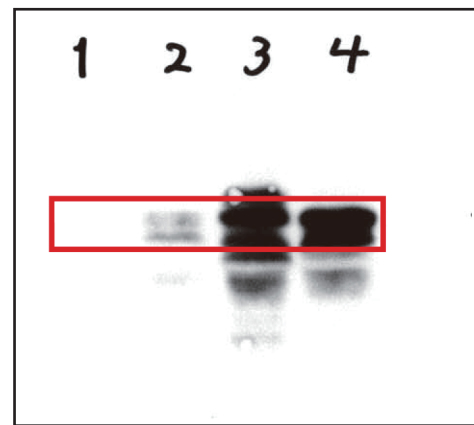
ARF



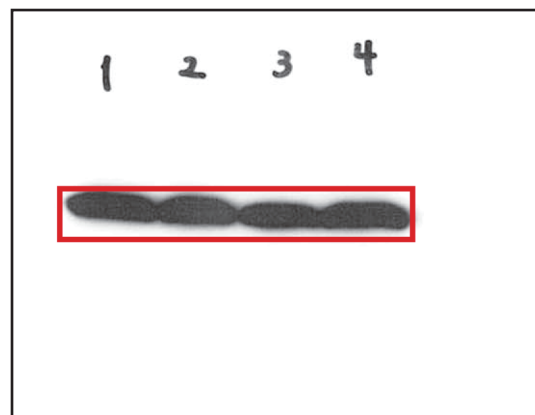
p53



E2F1



DP1



$\alpha$ -tubulin

Supplementary Figure S10

Full-length blots of indicted proteins illustrated in Figure 3(B).



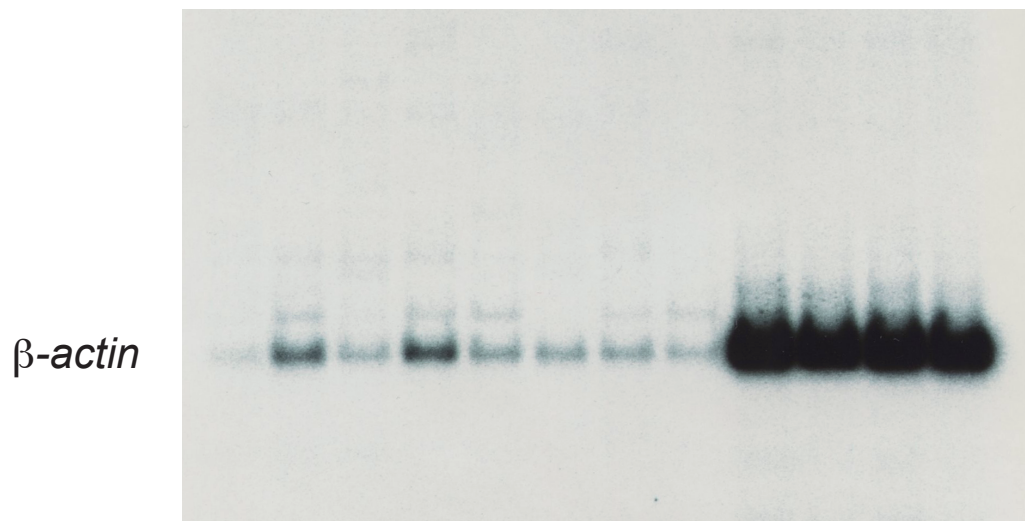
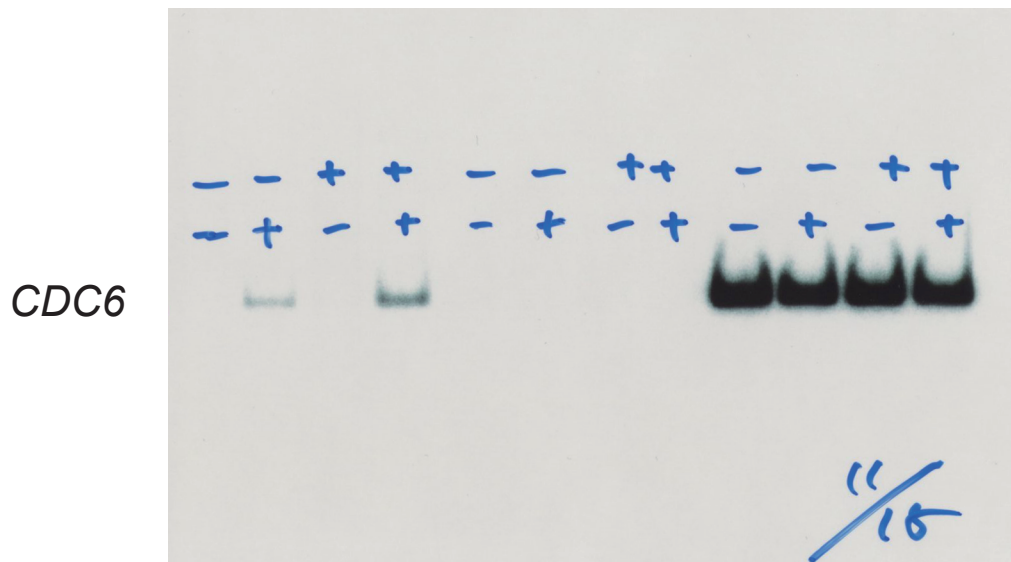
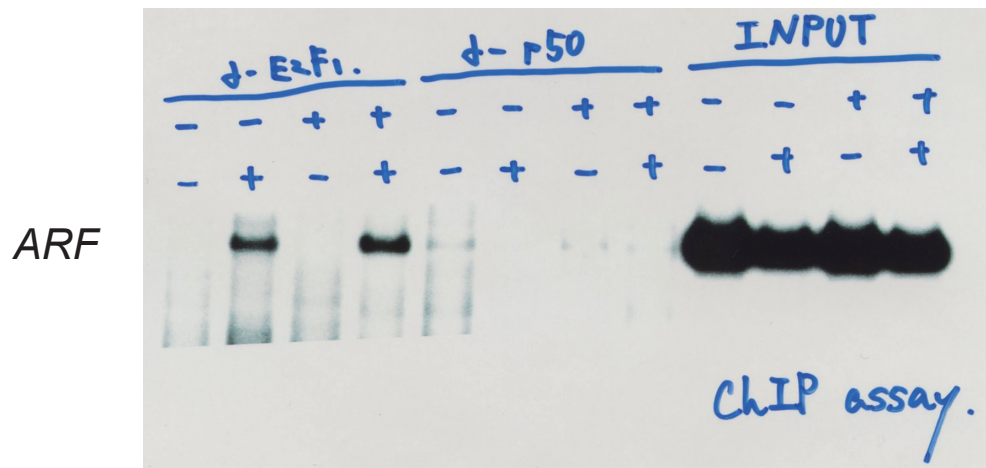
GST-E2F1



GST-DP1

### Supplementary Figure S11

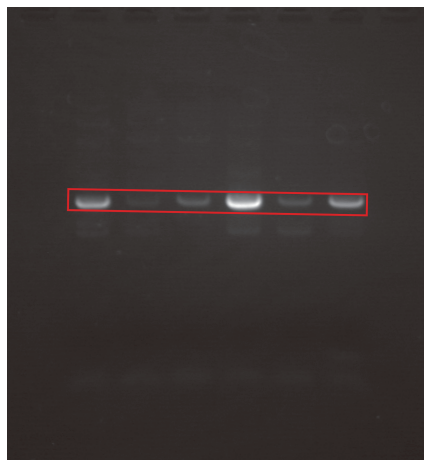
Full-length blots of purified GST-E2F1 and GST-DP1 illustrated in Figure 3(D).



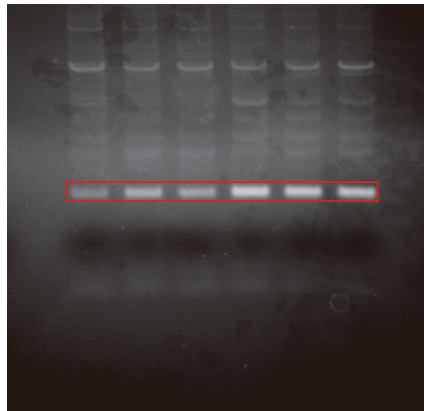
Supplementary Figure S12

Full-length gels of ChIP analysis illustrated in Figure 3(E).

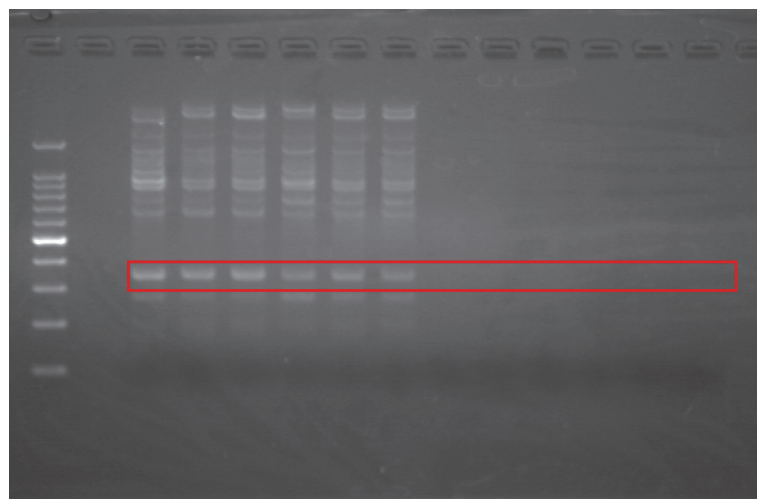
*DP1*



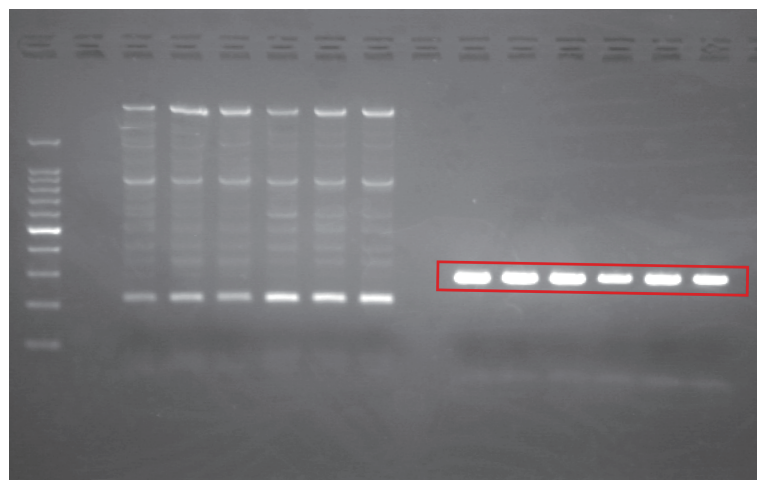
*DP2*



*DP3*

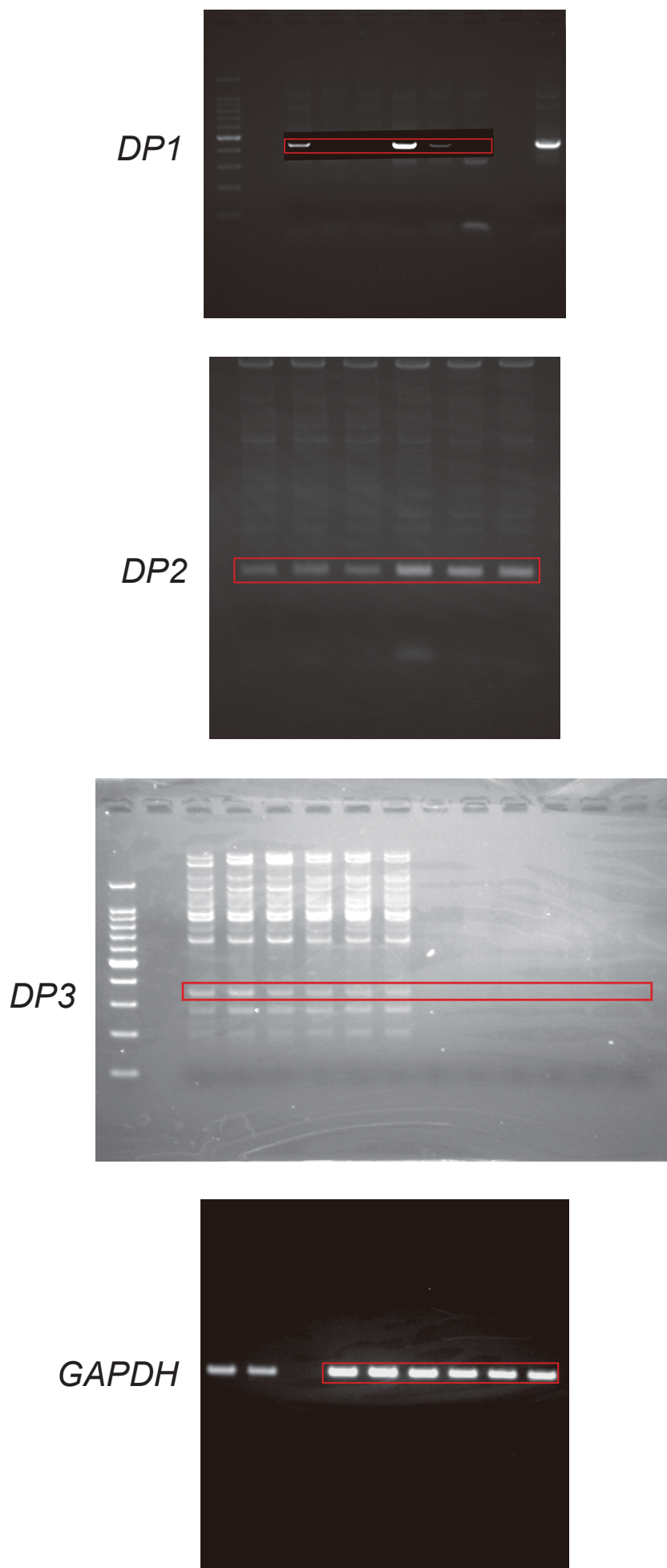


*GAPDH*



Supplementary Figure S13

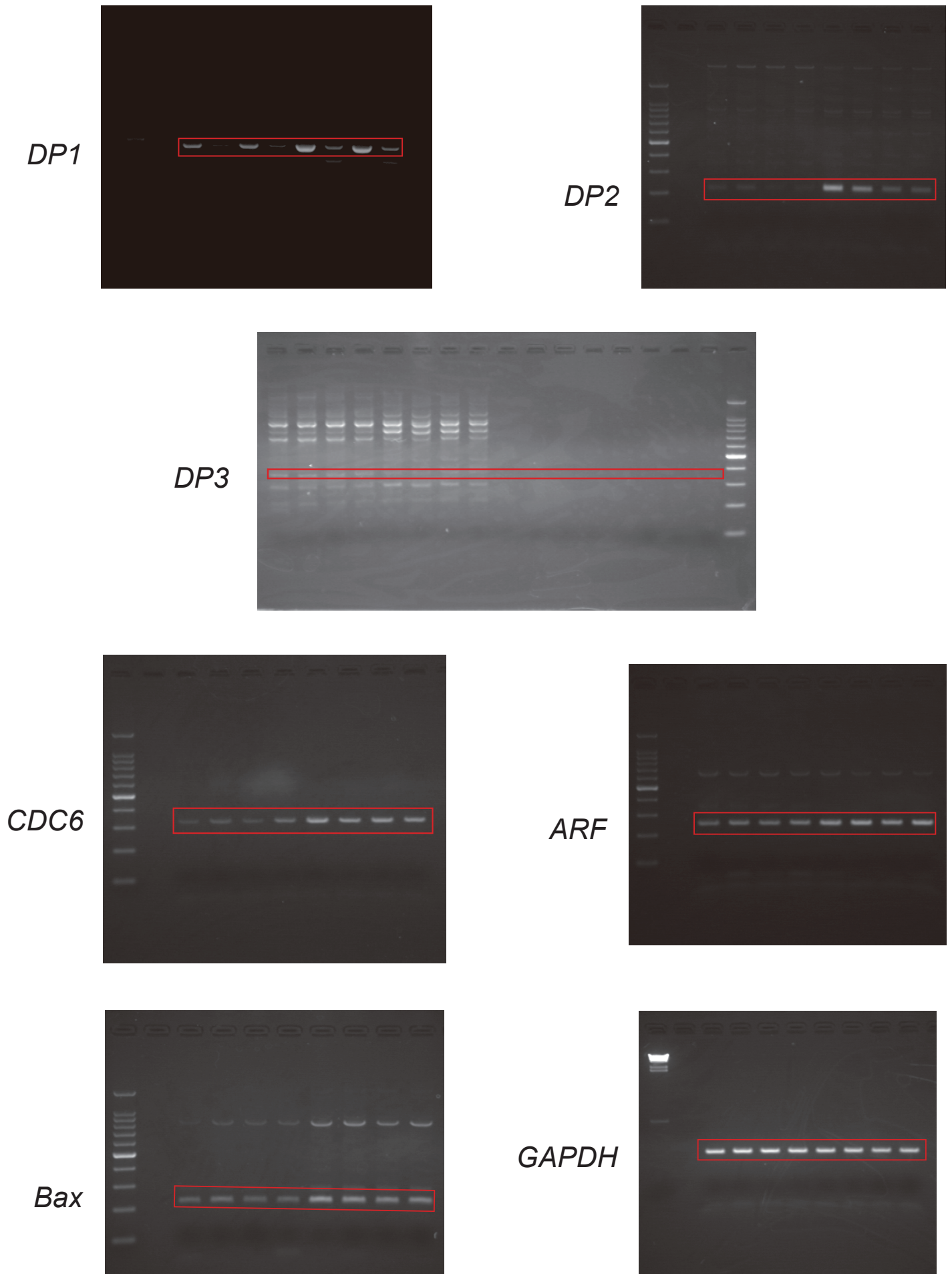
Full-length gels of indicated PCR products illustrated in Figure 4(A).



Supplementary Figure S14

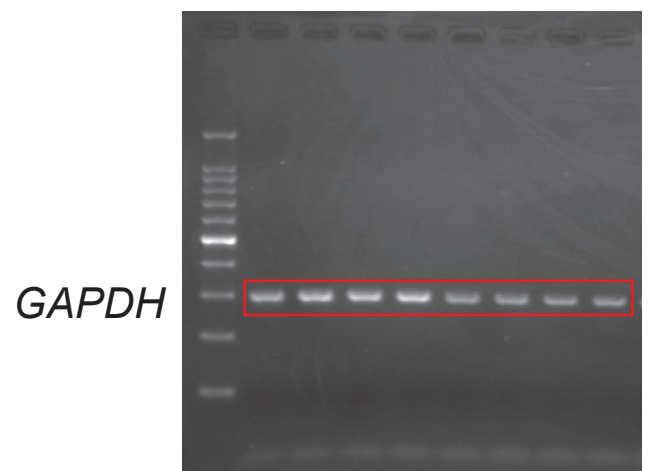
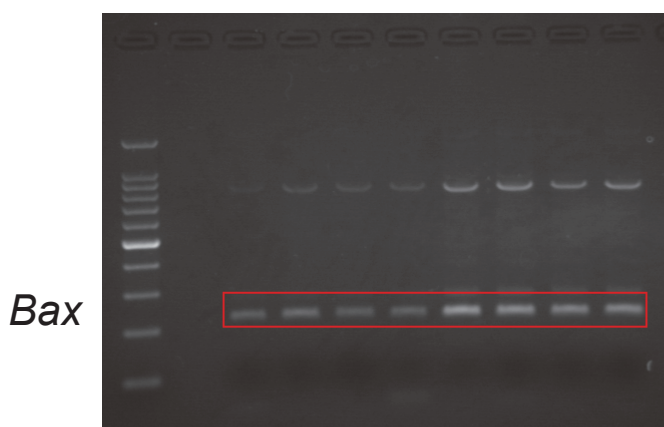
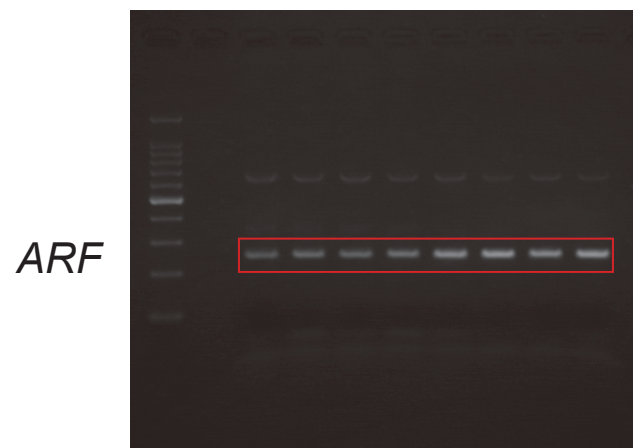
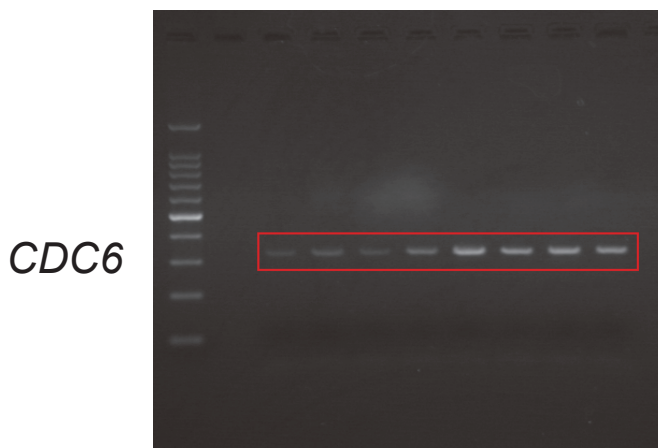
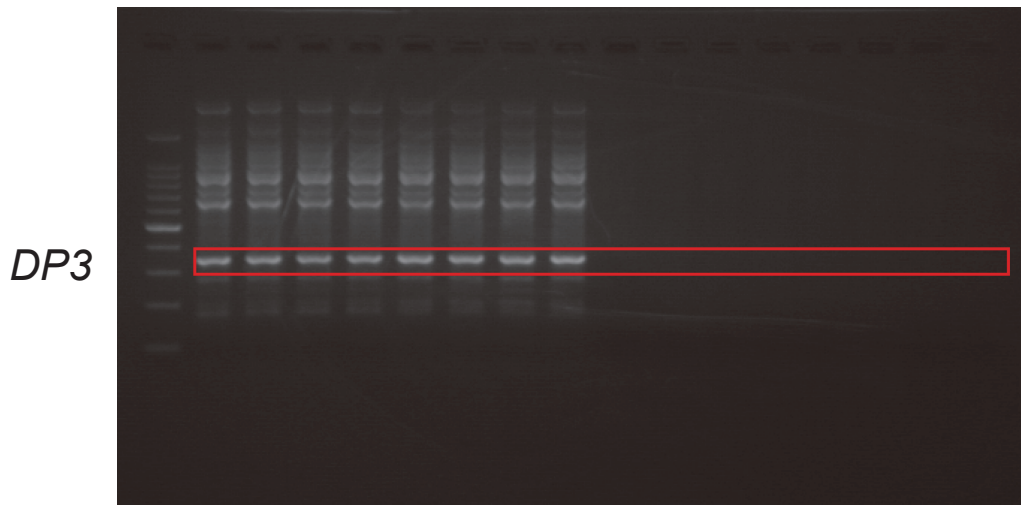
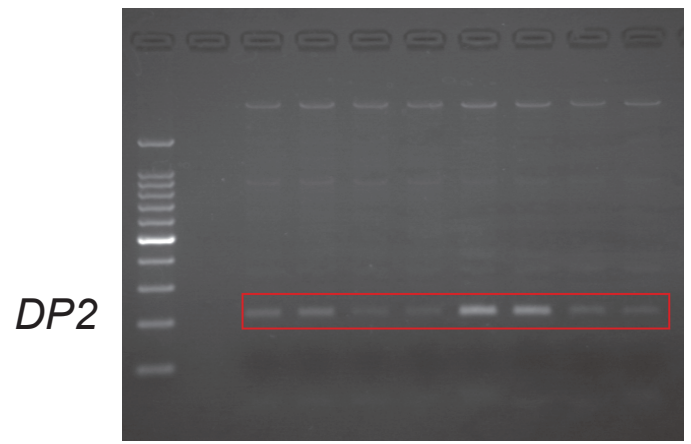
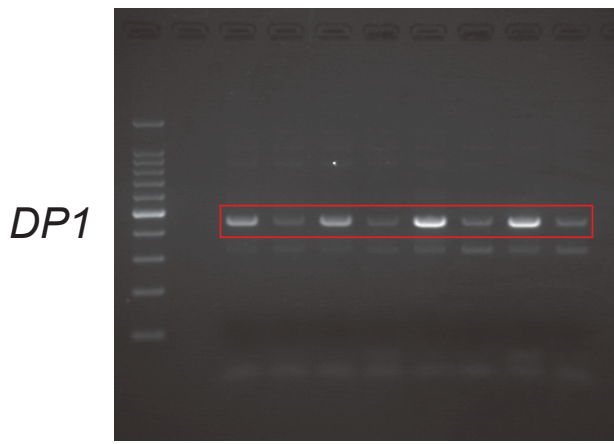
Full-length gels of indicated PCR products illustrated in Figure 4(B).





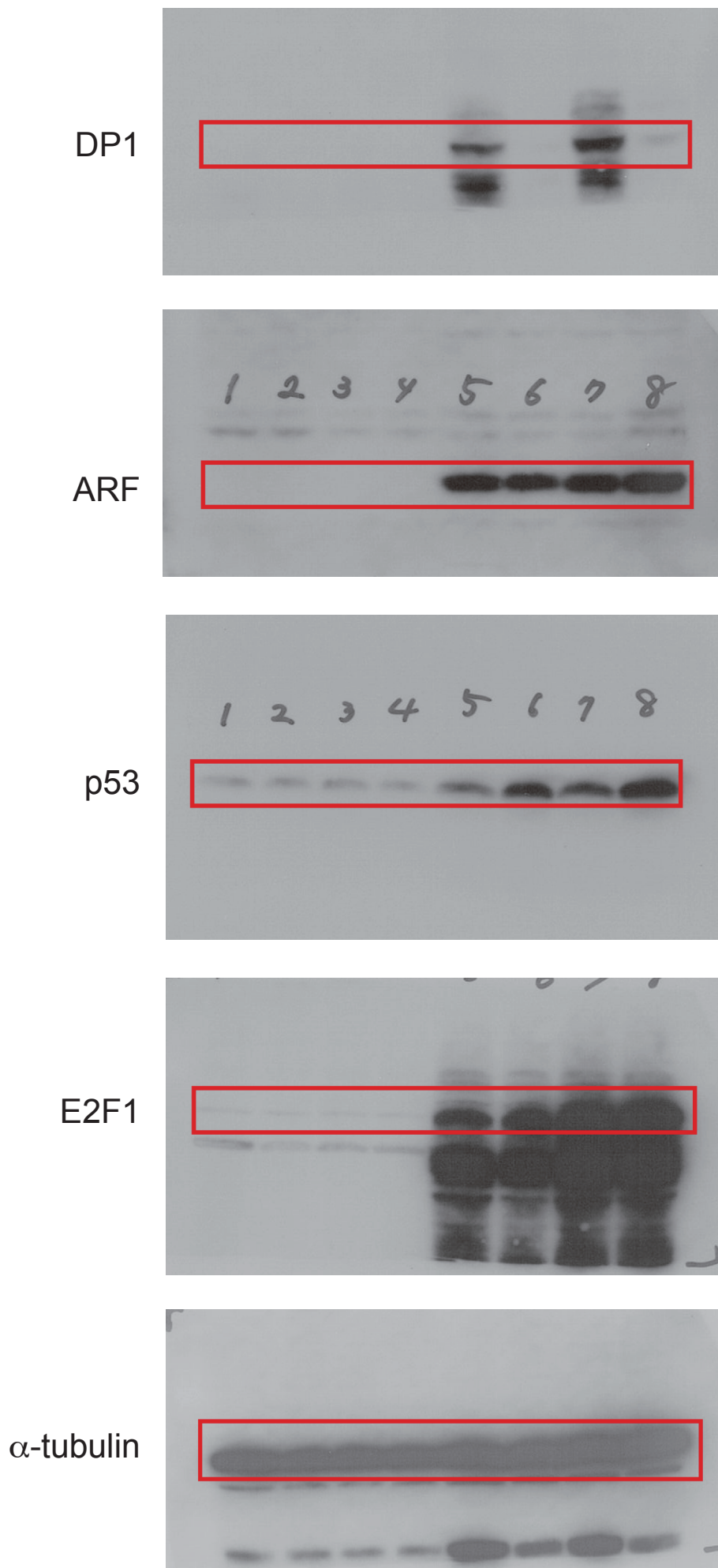
Supplementary Figure S15

Full-length gels of indicated PCR products illustrated in Figure 5(A).



Supplementary Figure S16

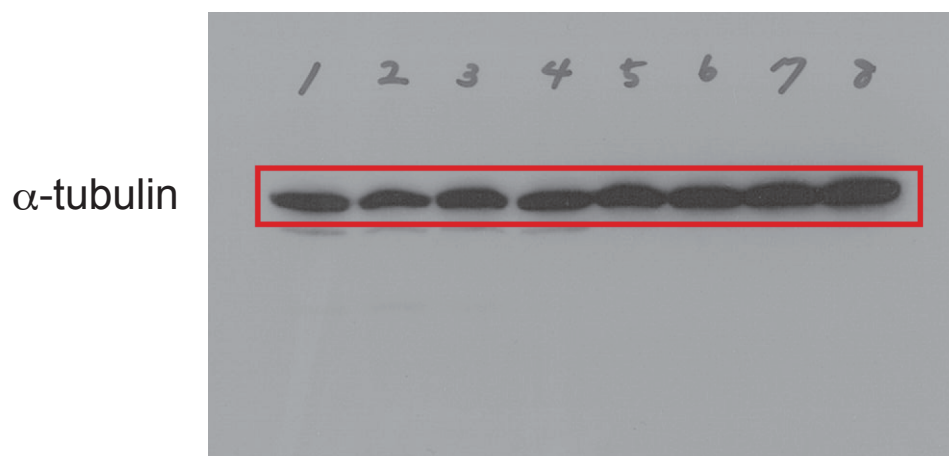
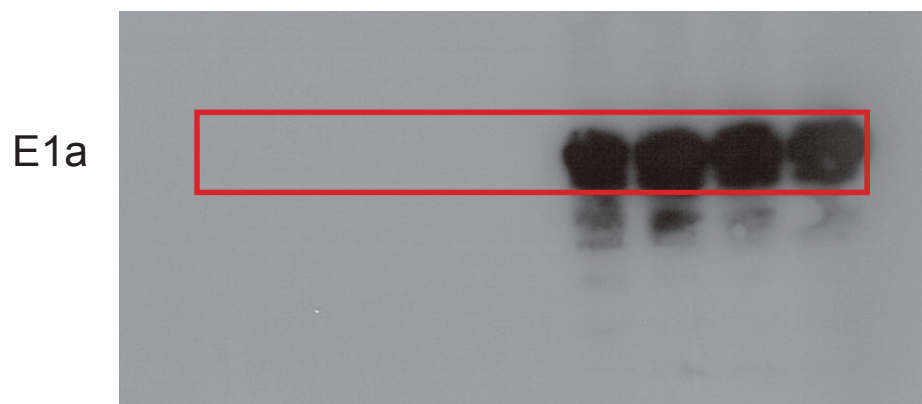
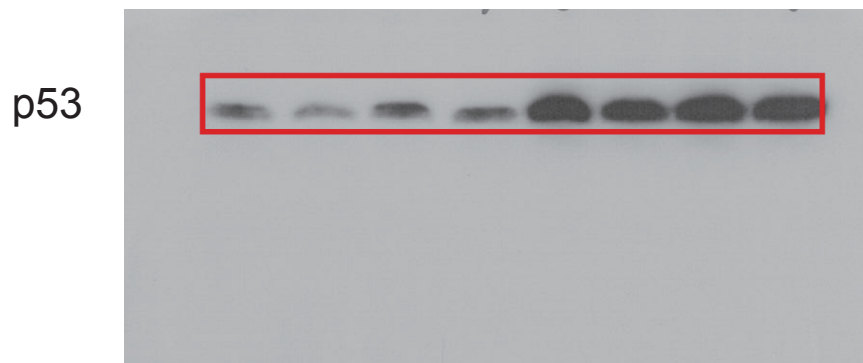
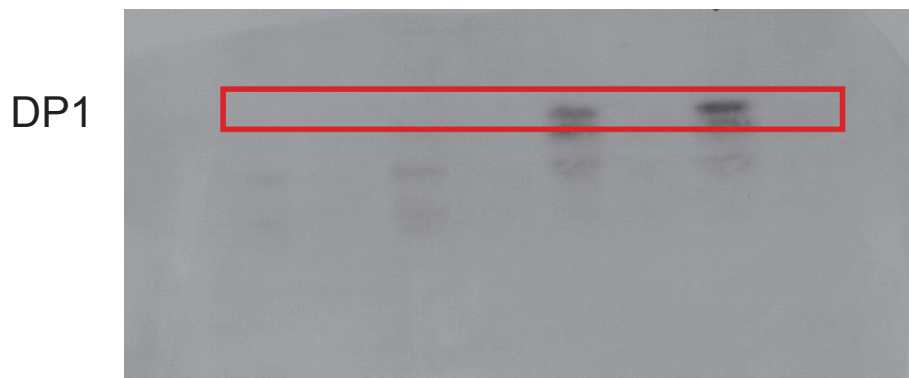
Full-length gels of indicated PCR products illustrated in Figure 5(B).



Supplementary Figure S17

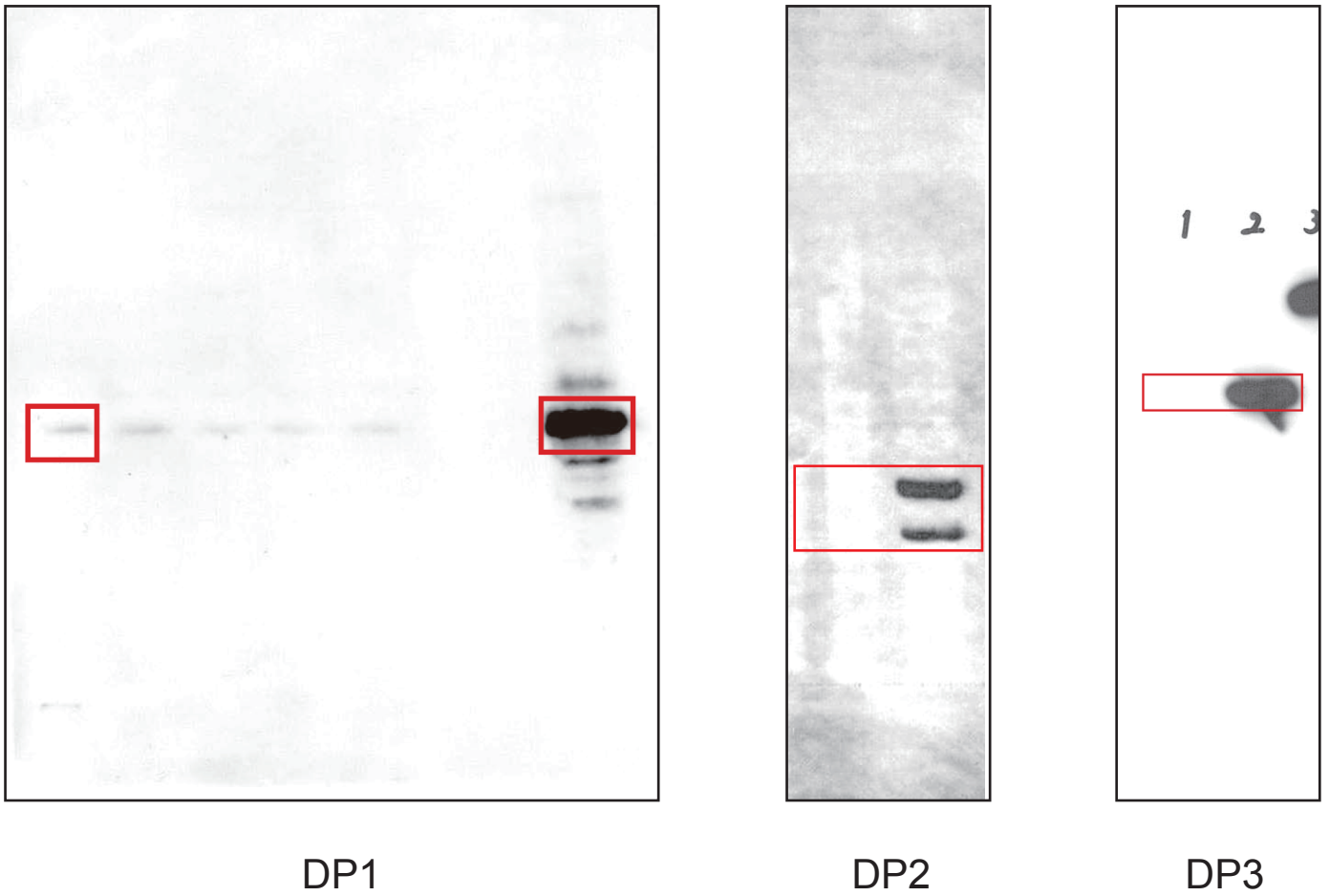
Full-length blots of indicated proteins illustrated in Figure 5(C).





Supplementary Figure S18

Full-length blots of indicated proteins illustrated in Figure 5(D).



Supplementary Figure S19

Full-length blots of DP proteins illustrated in Figure 5(H).