**S2A**

<table>
<thead>
<tr>
<th>RA (μM)</th>
<th>48 hr</th>
<th>72 hr</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
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</tr>
</tbody>
</table>

**AP-2α**

```
1 2 3 4 5 6
```

**NPM**

```
1 2 3 4 5 6
```

**β-actin**

```
1 2 3 4 5 6
```

**RA (5μM)**

```
0 24 48 72
```

**c-Myc**

```
0 24 48 72
```

**YY1**

```
1 2 3 4 5 6
```

**NPM**

```
1 2 3 4 5 6
```

**β-actin**

```
1 2 3 4 5 6
```

**S2B**

**Putative AP-2α binding sites**

```
-552
YY1
exon 1
-503-512
GGCTTCAGGCC
-311-321
GCCGGCGCGCGCTGGAGCG
+2217
```

**S2C**

<table>
<thead>
<tr>
<th>RA (μM)</th>
<th>24 hr</th>
<th>48 hr</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
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<tr>
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</tr>
</tbody>
</table>

**Input**

```
1 2 3
```

**c-Myc**

```
1 2 3
```

**YY1**

```
1 2 3
```

**IgG**

```
1 2 3
```
**Figure S2**

(A) Effect of RA on the levels of AP-2α, c-Myc, YY1, and NPM polypeptides. HL-60 cells were treated with 0, 1, or 5 µM of RA, as indicated. Cells were then harvested at the indicated time points. AP-2α (lanes 1-6), c-Myc (lanes 7-10), YY1 (lanes 11-14), NPM (lanes 1-14) and β-actin (lanes 1-14) were detected by Western blotting using the respective specific antibodies.

(B) The schematic diagram of the *NPM* promoter. This diagram outlines the organization of upstream regulatory region of the gene, which encompasses the c-Myc, YY1 and putative AP-2α binding sites. Sequences corresponding to the two consensus AP-2α-binding sites are shown.

(C) Chromatin was prepared from HL-60 cells previously treated with the indicated amounts of RA (0, 1, or 5 µM) for 24 (lanes 1-3), or 48 (lanes 4-6) hrs. ChIP analysis was performed using control antibodies (IgG) or antibodies against c-Myc or YY1. Products from final PCR analysis using primers specific to the *NPM* promoter were resolved by agarose gel. Precipitated products are shown in the lower panels, DNA input in the top.