Figure S1

(a) Wt_Apo

(b) P22L_Apo

(c) Q24R_Apo

(d) M62A_Apo
Figure S2

[Image of Western blotting results showing protein expression levels for HDM2 and Actin across different conditions: WT, Q24R, M62A, pcDNA with treatments DMSO, 10μM Nutlin, 40μM PM2CON, and 40μM PM2.]
### Figure S3a

<table>
<thead>
<tr>
<th></th>
<th>Cluster 1</th>
<th>Cluster 2</th>
<th>Cluster 3</th>
<th>Cluster 4</th>
<th>Cluster 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>WT-HDM2</td>
<td><img src="image1" alt="Image" /></td>
<td><img src="image2" alt="Image" /></td>
<td><img src="image3" alt="Image" /></td>
<td><img src="image4" alt="Image" /></td>
<td><img src="image5" alt="Image" /></td>
</tr>
<tr>
<td>% Population of each clusters</td>
<td>27</td>
<td>9</td>
<td>42</td>
<td>8</td>
<td>14</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
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<th>Cluster 2</th>
<th>Cluster 3</th>
<th>Cluster 4</th>
<th>Cluster 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>M62A</td>
<td><img src="image6" alt="Image" /></td>
<td><img src="image7" alt="Image" /></td>
<td><img src="image8" alt="Image" /></td>
<td><img src="image9" alt="Image" /></td>
<td><img src="image10" alt="Image" /></td>
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<tr>
<td>% Population of each clusters</td>
<td>63</td>
<td>20</td>
<td>4</td>
<td>8</td>
<td>4</td>
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</tbody>
</table>
### Figure S3b

<table>
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<th>Cluster 4</th>
<th>Cluster 5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>WT-HDM2</strong></td>
<td><img src="image1.png" alt="Image" /></td>
<td><img src="image2.png" alt="Image" /></td>
<td><img src="image3.png" alt="Image" /></td>
<td><img src="image4.png" alt="Image" /></td>
<td><img src="image5.png" alt="Image" /></td>
</tr>
<tr>
<td>% Population of each clusters</td>
<td>45</td>
<td>18</td>
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<td>13</td>
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</tr>
<tr>
<td><strong>P20L</strong></td>
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<td><img src="image8.png" alt="Image" /></td>
<td><img src="image9.png" alt="Image" /></td>
<td><img src="image10.png" alt="Image" /></td>
</tr>
<tr>
<td>% Population of each clusters</td>
<td>50</td>
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<td>14</td>
<td>11</td>
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<tr>
<td><strong>Q24R</strong></td>
<td><img src="image11.png" alt="Image" /></td>
<td><img src="image12.png" alt="Image" /></td>
<td><img src="image13.png" alt="Image" /></td>
<td><img src="image14.png" alt="Image" /></td>
<td><img src="image15.png" alt="Image" /></td>
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<tr>
<td>% Population of each clusters</td>
<td>25</td>
<td>41</td>
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<td>8</td>
<td>8</td>
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</tbody>
</table>
Figure S5

**p53**

**Nutlin**

**Stapled Peptide**