



**C**

| Cphx homeodomain |                                                                                                                                 | Identity |
|------------------|---------------------------------------------------------------------------------------------------------------------------------|----------|
| Mm.Cphx:         | NSKPRHKFSRDELKRLKQEFAYAPYPDFTTKDELARQFQCEVSVIDNWFQNKRRARLAPEL                                                                   | 100%     |
| Hs.CPHX1:        | K <b>T</b> .H..... <b>EEL</b> . <b>QE</b> .. <b>EI</b> .GENC... <b>Y</b> .. <b>RKT</b> .. <b>IK</b> .D.P. <b>N</b> .....P.AE    | 58%      |
| Hs.CPHX2:        | K <b>T</b> .H..... <b>EEL</b> . <b>QE</b> .. <b>EI</b> .GENG..... <b>RKT</b> .. <b>NK</b> .D.P. <b>N</b> .....N....P.. <b>E</b> | 57%      |
| Hs.Cphx-r1:      | <b>SV</b> ..WL.. <b>AK</b> . <b>K</b> .SV.. <b>Q</b> .S..QN... <b>N</b> .. <b>REK</b> ..G.-----                                 |          |
| Hs.Cphx-r2:      | - <b>T</b> . <b>HKD</b> .. <b>PEE</b> .. <b>C</b> .. <b>NEKY</b> .QH... <b>N</b> .. <b>R</b> -.. <b>VK</b> .LH.H.C.-----        |          |

| DUXB homeodomain 1 |                                                                                                                             | Identity |
|--------------------|-----------------------------------------------------------------------------------------------------------------------------|----------|
| Mm.Duxbl.hd1:      | ARRRRIILTQSQKDTLRVWFEEKNPNDLATRGHLAKELGISES--QIMTWQKHKRIRKQAE                                                               | 100%     |
| Hs.Duxbl-r:        | ... <b>K</b> .. <b>V</b> .N..... <b>QA</b> ..... <b>Y</b> . <b>GI</b> .A.DQ.... <b>I</b> .. <b>PEPRI</b> . <b>VGI</b> ..... |          |
| Hs.DUXB.hd1:       | FW.N..QYN.....I.. <b>QS</b> .. <b>QH</b> .F.. <b>K</b> .A.EQ.... <b>I</b> . <b>VP</b> ..--N.QV.. <b>KNY</b> .VKQRKLD        | 45%      |

| DUXB homeodomain 2 |                                                                                                                                     | Identity |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------|----------|
| Mm.Duxbl.hd2:      | ARRSRTHFTKFQTDILIEAFEKNRFPGIVTREKLAQQTGIPESRIHIWFQNRRRARHPDPG                                                                       | 100%     |
| Hs.DUXB.hd2:       | .. <b>QKQ</b> .FI.WT.KNR. <b>VQ</b> ... <b>R</b> .P..D.A.. <b>K</b> ... <b>E</b> ... <b>LQ</b> ... <b>QM</b> ... <b>KQ</b> .SLYLKKS | 48%      |