

Query Protein: ASK1 MSAKKIVLKSSDGESFEVEEA--VALESQTIAHMVEDDCVDNGVPLPNV
Consense Residues MS K IV+ SSDG++F+++EA VA +S I M ED C DNG+PLPNV
Prediction MSKKIIVVTSSDGDTFQIDEAR!VAFQSAMIKGMDEDKCADNGIPLPNV
Target DNA: AiySKP02 ataaaaggaatgggatcagggcgggtctgaaagagggatggagaccag
tcaatthtcgcagactataacg tctaccttagtaaaagcaagtctcat
gaggacgggcctthttgcccagc gacagggagtgtatgtcttacgtacc


**Frame Shift
mutation**

Query Protein: ASK1 TSKILAKVIEYCKRHVEAAAASKAEAVEGAATSDDDLKAWDADFMK-IDQ
Consense Residues TSKIL VIEYCK+HV VE ++ LK WD +FMK +Q
Prediction TSKILLLVIEYCKKHV-----VEN--EEEEYLKKWDTFEMKKMEQ
Target DNA: AiySKP02 aaaacttgagttaacg gga ggggtcaatgagtaaaagc
cgatthtttaagaaat taa aaaaataagacattaataa
acgccggttgctcgcc cgc aaaatcgggctacggggaa

Query Protein: ASK1 ATLFELILAANYLNIKNLLDLTCQTVADMIKGTPEEIRTFNIKNDFT
Consense Residues + +F++++AANYLNI++L+DLTC+TVAD++ GKTPEEIR F I+NDFT
Prediction SIVFDVMMMAANYLNIQSLIDLTCQTVADFLSGKTPEEIRAYFKIENDFT
Target DNA: AiySKP02 tagtggaggatcaacacagcataagggctctgaacggacgttaagagta
ctthatttccaatatagttatcgactcattcgaccaatgcatataaatc
gtctthgggtgttctcactthtcgtatthtttcaaataggtcaccgcgctta

Query Protein: ASK1 PEEEEVRRENQWAFE
Consense Residues PEEE E+ RENQWAFE
Prediction PEEEAELRENQWAFE
Target DNA: AiySKP02 cgggggacagactgtg
caaacattgaaagcta
agaatgctcggtagttg