

Human DIRAS1 (RIG)

```

                                >AflIII      >Asp7181
                                |              |
                                |              |
>NheI      >PmeI      >HindIII      >KpnI      >BamHI
|           |           |           |           |
|           |           |           |           |
10          20          30          40
GCT AGC GTT TAA ACT TAA GCT TGG TAC CGA GCT CGG ATC CAC TAG TCC

    >BstXI      >EcoRI
    |           |
50  |           | 60          70          80          90
AGT GTG GTG GAA TTC ATG CCG GAA CAG AGT AAC GAT TAC CGC GTG GTG
    M   P   E   Q   S   N   D   Y   R   V   V>
                _____HUMAN DIRAS1_____>

100          110          120          130          140
GTG TTC GGG GCG GGC GGC GTG GGC AAG AGC TCG CTG GTG CTG CGC TTC
V   F   G   A   G   G   V   G   K   S   S   L   V   L   R   F>
                _____HUMAN DIRAS1_____>

150          160          170          180          190
GTG AAG GGC ACG TTC CGC GAC ACC TAC ATC CCC ACC ATC GAG GAC ACC
V   K   G   T   F   R   D   T   Y   I   P   T   I   E   D   T>
                _____HUMAN DIRAS1_____>

200          210          220          230          240
TAC CGG CAG GTG ATC AGC TGC GAC AAG AGC GTG TGC ACG CTG CAG ATC
Y   R   Q   V   I   S   C   D   K   S   V   C   T   L   Q   I>
                _____HUMAN DIRAS1_____>

250          260          270          280
ACA GAC ACC ACC GGC AGC CAC CAG TTC CCG GCC ATG CAG CGC CTG TCC
T   D   T   T   G   S   H   Q   F   P   A   M   Q   R   L   S>
                _____HUMAN DIRAS1_____>

290          300          310          320          330
ATC TCC AAG GGC CAC GCC TTC ATC CTG GTG TTC TCC GTC ACC AGC AAG
I   S   K   G   H   A   F   I   L   V   F   S   V   T   S   K>
                _____HUMAN DIRAS1_____>

340          350          360          370          380
CAG TCG CTG GAG GAG CTG GGG CCC ATC TAC AAG CTC ATC GTG CAG ATC
Q   S   L   E   E   L   G   P   I   Y   K   L   I   V   Q   I>
                _____HUMAN DIRAS1_____>

390          400          410          420          430
AAG GGC AGC GTG GAG GAC ATC CCC GTG ATG CTC GTG GGC AAC AAG TGC
K   G   S   V   E   D   I   P   V   M   L   V   G   N   K   C>
                _____HUMAN DIRAS1_____>

440          450          460          470          480
GAT GAG ACG CAG CGG GAG GTG GAC ACG CGC GAG GCG CAG GCG GTG GCC
D   E   T   Q   R   E   V   D   T   R   E   A   Q   A   V   A>
                _____HUMAN DIRAS1_____>

490          500          510          520

```

```

CAG GAG TGG AAG TGC GCT TTC ATG GAG ACC TCG GCC AAG ATG AAC TAC
Q   E   W   K   C   A   F   M   E   T   S   A   K   M   N   Y>
_____HUMAN DIRAS1_____>

```

```

530          540          550          560          570
AAC GTC AAG GAG CTC TTC CAG GAG CTG CTG ACG CTG GAG ACG CGC CGG
N   V   K   E   L   F   Q   E   L   L   T   L   E   T   R   R>
_____HUMAN DIRAS1_____>

```

nt549 G->C

```

580          590          600          610 |          620
AAC ATG AGC CTC AAC ATC GAC GGC AAG CGC TCC GGC AAG CAG AAG AGG
N   M   S   L   N   I   D   G   K   R   S   G   K   Q   K   R>
_____HUMAN DIRAS1_____>

```

```

                                     >XhoI   >XbaI
                                     |         |
630          640          650          660 |          | 670
ACA GAC CGC GTC AAG GGC AAA TGC ACC CTC ATG TGA CTC GAG TCT AGA
T   D   R   V   K   G   K   C   T   L   M   *>
_____HUMAN DIRAS1_____>

```

```

>ApaI   >PmeI
  |       |
  | 680   |
GGG CCC GTT TAA AC

```