Alignment: atp1_G168 translation frame +1

**Positions 1–50**

```
atp1_G168_DNA translation frame +1    MEFSPRAAET TTTLESRMTN FYTNFQVDEI GRVVSVGDGI ARVYGLNEIQ  50
atp1 G168 control translation frame +1 .........L ..L....... .......... .......... ..........  50
atp1 G168 2H translation frame +1      .........L ..L....... .......... .......... ..........  50
atp1 G168 12H translation frame +1     .........L ..L....... .......... .......... ..........  50
```

**Positions 51–100**

```
atp1_G168_DNA translation frame +1    AGEMVEFASG VKGIALNTEN ENVGIVVFGS DTAIKEGDTV KRTGSIVDVP 100
atp1 G168 control translation frame +1 .......... ........L. .......... .......L.. .......... 100
atp1 G168 2H translation frame +1      .......... ........L. .......... .......L.. .......... 100
atp1 G168 12H translation frame +1     .......... ........L. .......... .......L.. .......... 100
```

**Positions 101–150**

```
atp1_G168_DNA translation frame +1    AGKAMLGRVV DALGVPIDGK GATSDHERRR VEVKAPGIIE RKSVHEPMQT 150
atp1 G168 control translation frame +1 .......... .......... ..L....... .......... .......... 150
atp1 G168 2H translation frame +1      .......... .......... ..L....... .......... .......... 150
atp1 G168 12H translation frame +1     .......... .......... ..L....... .......... .......... 150
```

**Positions 151–200**

```
atp1_G168_DNA translation frame +1    GLKAVDSTVP MGRGQRETMI GDRQTGKTAM AIDTMLNQKQ MNSRGTNESE 200
atp1 G168 control translation frame +1 .......L.. I.....LI.. ....I..... ....I..... .......... 200
atp1 G168 2H translation frame +1      .......L.. I.....LI.. ....I..... ....I..... .......... 200
atp1 G168 12H translation frame +1     .......L.. I.....LI.. ....I..... ....I..... .......... 200
```

**Positions 201–250**

```
atp1_G168_DNA translation frame +1    TLYCVYVAIG QKRSTVAQLV QITSEANALE YSITVAATAS DPAPTQFTAP 250
atp1 G168 control translation frame +1 .......... ....L..... ....L..... ....L..... ....L..L.. 250
atp1 G168 2H translation frame +1      .......... ....L..... ....L..... ....L..... ....L..L.. 250
atp1 G168 12H translation frame +1     .......... ....L..... ....L..... ....L..... ....L..L.. 250
```

**Positions 251–300**

```
atp1_G168_DNA translation frame +1    YSGCAMGEYF RDNGMHALIM YDDTSKQAVA YRQMSLLLRR PPGREAFPGD 300
atp1 G168 control translation frame +1 .......... ......I... ...L...... .......... .......... 300
atp1 G168 2H translation frame +1      .......... ......I... ...L...... .......... .......... 300
atp1 G168 12H translation frame +1     .......... ......I... ...L...... .......... .......... 300
```

**Positions 301–350**

```
atp1_G168_DNA translation frame +1    VFYLHSRTLE RAAKRSDQTG AGSSTALPVI ETQSGDVSAY IPTNVISITD 350
atp1 G168 control translation frame +1 ......L... .......... ...L...... .......... .......... 350
atp1 G168 2H translation frame +1      ......L... .......... ...L...... .......... .......... 350
atp1 G168 12H translation frame +1     ......L... .......... ...L...... .......... .......... 350
```

**Positions 351–400**

```
atp1_G168_DNA translation frame +1    GQICLETETF YRGIRPAINV GLSVSRVGSA AQLKAMKQVC GSSKTELAQY 400
atp1 G168 control translation frame +1 .......L.. .......... .......... .......... ..L.L..... 400
atp1 G168 2H translation frame +1      .......L.. .......... .......... .......... ..L.L..... 400
atp1 G168 12H translation frame +1     .......L.. .......... .......... .......... ..L.L..... 400
```

| atp1_G168_DNA translation frame +1 | **R E V A A F A Q F G  S D T D A A T Q A L  T N R G A R T T E V  P K Q P Q Y E P T P  I E K Q I V V I Y A** | 450 |
|---|---|---|
| atp1 G168 control translation frame +1 | . . . . . . . . . .  . . L . . . . . . .  . L . . . . L . . .  L . . . . . . . L .  . . . . . . . . . . | 450 |
| atp1 G168 2H translation frame +1 | . . . . . . . . . .  . . L . . . . . . .  L . . . . L . . .  L . . . . . . . L .  . . . . . . . . . . | 450 |
| atp1 G168 12H translation frame +1 | . . . . . . . . . .  . . L . . . . . . .  . L . . . L . . .  L . . . . . . . L .  . . . . . . . . . . | 450 |

| atp1_G168_DNA translation frame +1 | **A V N G F C D R M P  T D R I S Q Y E K A  I T S T I N P E L Q  K S F L E K G G L T  N E R K M E P D A S** | 500 |
|---|---|---|
| atp1 G168 control translation frame +1 | . . . . . . . . . .  L . . . . . . . . .  . L . . . . . . . .  . . . . . . . . . .  . . . . . . L . . F | 500 |
| atp1 G168 2H translation frame +1 | . . . . . . . . . .  L . . . . . . . . .  . L . . . . . . . .  . . . . . . . . . .  . . . . . . L . . F | 500 |
| atp1 G168 12H translation frame +1 | . . . . . . . . . .  L . . . . . . . . .  . L . . . . . . . .  . . . . . . . . . .  . . . . . . L . . F | 500 |

| atp1_G168_DNA translation frame +1 | **L K E S T L P Y T W** | 510 |
|---|---|---|
| atp1 G168 control translation frame +1 | . . . . . . . . L * | 510 |
| atp1 G168 2H translation frame +1 | . . . . . . . . L * | 510 |
| atp1 G168 12H translation frame +1 | . . . . . . . . L * | 510 |