

A

Dstok28 genomic
Dstrig102 genomic
Apl genomic
FLAp2-10AB genomic
Pe genomic
Pk702 genomic
SSPe genomic
Symbiodinium minutum Pd genomic
Symbiodinium psymophilum HIAP genomic
Symbiodinium psymophilum PurPFlex genomic
Zp genomic
Apl cDNA
FLAp2-10AB cDNA
Pe cDNA
Pk702 cDNA
SSPe cDNA
Symbiodinium minutum Pd cDNA
Symbiodinium psymophilum HIAP cDNA
Symbiodinium psymophilum PurPFlex cDNA
Zp cDNA
Codon Position

Amino acids

```
GCTGGCGCAGCTGCTGgtacctaggttctt>>>aa.tgttg...tcagGTGTGATGATGGCT
GCCGGCGCAGCTGCTGgtacctaggttctt>>>aa.tgttggcagtcagGTGTGATGATGGCT
GCTGGCGCAGCTGCTGgtacctaggttctt>>>aaatggtggcagtcagGTGTGATGATGGCT
GCTGGCGCAGCTGCTGgtacctaggttctt>>>aaatggtggcagtaagGTGTGATGATGGCT
GCTGGCGCAGCTGCTGgtacctaggttctt>>>aa.tgttggcagtcagGTGTGATGATGGCT
GCCGGCGCAGCTGCTGgtatctaggttctt>>>aa.tgttggcagtcagGTGTGATGATGGCT
GCTGGCGCAGCTGCTGgtacctaggttctt>>>aa.tgttggcagtcagGTGTGATGATGGCT
GCTGGCGCAGCTGCTGgtacctaggttctt>>>aaatggtggcagtcagGTGTGATGATGGCT
GCCGGCGCAGCTGCTGgtacctaggttctt>>>aa.tgttggcagtcagGTGTGATGATGGCT
GCCGGCGCAGCTGCTGgtacctaggtctt>>>aa.tgttggcagtcagGTGTGATGATGGCT
GCTGGCGCAGCTGCTGgtacctaggttctt>>>aa.tgttggcagtcagGTGTGATGATGGCT
GCTGGCGCAGCTGCTG.....>>>.....GTGTGATGATGGCT
GCTGGCGCAGCTGCTG.....>>>.....GTGTGATGATGGCT
GCTGGCGCAGCTGCTG.....>>>.....GTGTGATGATGGCT
GCCGGCGCAGCTGCTG.....>>>.....GTGTGATGATGGCT
GCCGGCGCAGCTGCTG.....>>>.....GTGTGATGATGGCT
GCTGGTGCAGCTGCTG.....>>>.....GTGTGATGATGGCT
GCTGGTGCAGCTGCTG.....>>>.....GTGTGATGATGGCT
GCTGGTGCAGCTGCTG.....>>>.....GTGTGATGATGGCT
GCTGGTGCAGCTGCTG.....>>>.....GTGTGATGATGGCT
GCTGGTGCAGCTGCTG.....>>>.....GTGTGATGATGGCT
1231231231231231                23123123123123
| | | | |                          | | | | |
A G A A A                          G V M M A
```

B

Dstok28 genomic
Dstrig102 genomic
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SSPe cDNA
Symbiodinium minutum Pd cDNA
Symbiodinium psymophilum HIAP cDNA
Symbiodinium psymophilum PurPFlex cDNA
Zp cDNA
Codon Position

Amino acids

```
TTTCTCCAAGCTCCAGgcattagggcattgg>>>gttgccctggtggtgagGCTCGTTTCAGCCA
TTTCTCCAAGCTCCAGgcattagggcattagg>>>gttacctggtgcccagGCTCGTTTCAGCCA
TTTCTCCAAGCTCCAGgcattagggcattgg>>>gttgccctggtggtgagGCTCGTTTCAGCCA
TTTCTCCAAGCTCCAGgcattagggcattgg>>>gttgccctggtggtgagGCTCGTTTCAGCCA
TTTCTCCAAGCTCCAGgcattagggcattgg>>>gttgccctggtggtgagGCTCGTTTCAGCCA
TTTCTCCAAGCTCCAGgcattagggcattagg>>>gttacctggtgcccagGCTCGTTTCAGCCA
TTTCTCCAAGCTCCAGgcattagggcattagg>>>gttacctggtgcccagGCTCGTTTCAGCCA
TTTCTCCAAGCTCCAGgcattagggcattgg>>>gttgccctggtggtgagGCTCGTTTCAGCCA
TTTCTCCAAGCTCCAG.....>>>.....GCTCGTTTCAGCCA
TTTCTCCAAGCTCCAG.....>>>.....GCTCGTTTCAGCCA
TTTCTCCAAGCTCCAG.....>>>.....GCTCGTTTCAGCCA
TTTCTCCAAGCTCCAG.....>>>.....GCTCGTTTCAGCCA
TTTCTCCAAGCTCCAG.....>>>.....GCTCGTTTCAGCCA
TTTCTCCAAGCTCCAG.....>>>.....GCTCGTTTCAGCCA
TTTCTCCAAGCTCCAG.....>>>.....GCTCGTTTCAGCCA
TTTCTCCAAGCTCCAG.....>>>.....GCTCGTTTCAGCCA
1231231231231231                23123123123123
| | | | |                          | | | | |
F L Q A P                          G S F Q P
```

C

Symbiodinium microadriaticum genomic
Symbiodinium microadriaticum cDNA
Codon Position

Amino acids

```
TTGGATGTGCTCAAGgcattgatccccatt>>>ccgagaacatcgtagGCCATCGACACCATG
TTGGATGTGCTCAAG.....>>>.....GCCATCGACACCATG
1231231231231231                123123123123123
| | | | |                          | | | | |
L D V L K                          A I D T M
```