

A

```
wrasse      MATYPNPEDDAMALMIHDTN-- --TTKEKERPKKEEPVQEKVSEKPDPTQKPPYSYVALIA
tilapia     MMATYQNPEDDAMALMIHDTN-- --TTKEKERPKKEEPVQDKVSEKPDPSQKPPYSYVALIA
flounder    MMATYQNSEDDAMALMIHDTN-- --ASKEKERPKKEEPVQEKVSEKPDPSQKPPYSYVALIA
trout       MMDTYQNPEDDAMALMVHDTN-- --MAKDKERPKKEEPVQEKVSEKTDPSQKPPYSYVALIA
chicken     MMSGYADGEEDAVAMLAHDG-- --GSKEPERGKEELSAEKGPEKPDPSQKPPYSYVALIA
mouse       MMASYPEPEDTAGTLLAPESGRAVKEAEASPPSPGKGGGTTEKPDPAQKPPYSYVALIA
            **  *  :  *:  *  ::  :  .      :  .  .      .  **.  *.  *****
```

Forkhead domain

```
wrasse      MAIRESTEKRLTSLGIYQYIITKFFPYEKNKKGWQNSIRHNLSLNECFIKVPREGGGERK
tilapia     MAIRESSEKRLTSLGIYQYIITKFFPYEKNKKGWQNSIRHNLSLNECFIKVPREGGGERK
flounder    MAIRESSEKRLTSLGIYQYIISKFFPYEKNKKGWQNSIRHNLSLNECFIKVPREGGGERK
trout       MAIRESTEKRLTSLGIYQYIITKFFPYEKNKKGWQNSIRHNLSLNECFIKVPREGGGERK
chicken     MAIRESAEKRLTSLGIYQYIISKFFPYEKNKKGWQNSIRHNLSLNECFIKVPREGGGERK
mouse       MAIRESAEKRLTSLGIYQYIIAKFFPYEKNKKGWQNSIRHNLSLNECFIKVPREGGGERK
            *****:*****:*****:*****:*****:*****:*****
```

```
wrasse      GNYWTLDPACEDMFEKGNRYRRRRMKRPFPRPPPTHFQPGKSLFGG-----D
tilapia     GNYWTLDPACEDMFEKGNRYRRRRMKRPFPRPPPTHFQPGKALFGG-----D
flounder    GNYWTLDPACEDMFEKGNRYRRRRMKRPFPRPPPTHFQPGKSLFGG-----D
trout       GNYWTLDPACEDMFEKGNRYRRRRMKRPFPRPPPTHFQPGKSLFGG-----D
chicken     GNYWTLDPACEDMFEKGNRYRRRRMKRPFPRPPPTHFQPGKSLFGP-----D
mouse       GNYWTLDPACEDMFEKGNRYRRRRMKRPFPRPPPAHFQPGKGLFGSGGAAGCGVPGAGAD
            *****:*****:*****:*****:*****:*****:*****
```

```
wrasse      GGYLTPPKYLQSSFMNNSWSLGGQPPTPMSYTSQMASGNVSPVNVKALSAP-----
tilapia     SYGYLSPPKYLQSSFMNNSWSLGGQPPTPMSYTSQMASGNVSPVNVKGLSAP-----
flounder    GGYLSPPKYLQSSFMNNSWSLGGQPPTPMSYTSQMASGNVSPVNVKGLSPP-----
trout       GGYLSPPKYLQSSFMNNSWSLGGQPPTPMSYTSQMASGNVSPVNVKGLSAP-----
chicken     GGYLSPPKYLQSTFMNNSWPLPQPPAPVPYASCQMSGGSVSPVNVKGLSGP-----
mouse       GGYLAPPKYLQSGFLNNSWPLPQPPSPMPYASCQMAAAAAAAAAAAAAAGPGSPGAAAV
            .****:***** *:****. * ***:*.*:****:.. .:.. . . : *
```

```
wrasse      -----SSYNPYSRVQSMALPS-MVNSYNGMGHHHHHPA-----
tilapia     -----SSYNPYSRVQSMALPS-MVNSYNGMSHHHH-----
flounder    -----SSYNPYSRVQSMALPS-MVNSYNGMGHHHHHPA-----
trout       -----SSYNPYSRVQSMGLPS-MVNSYNGMSHHHHHP-----
chicken     -----ASYGPYSRVQSVALPG-MVNSYNGVAHPHPH-----
mouse       VKGLAGPAASYGPYSRVQSMALPPGVVNSYNGLGPPAAPPPPPPPHPHPHHAHLHA
            :*.*****:.* *:*****:.
```

```
wrasse      -----HPHHAQQLSPATAAPPVSSSNGAGLQFACSRQPAELSMMHCSY
tilapia     -----PHHTQQLSPATAAPPVSSSNGAGLQFACSRQPAELSMMHCSY
flounder    -----HPHHAQQLSPATAAPPVSSSNGAGLQFACSRQPAELSMMHCSY
trout       -----HAHHAQQLNPATVAPPVSSSNGAGLQFACSRQPTELSMMHCSY
chicken     -----HAHHPQQLGPASPAPPAAPAANGAGLQFACARQPAELSMVHCSY
mouse       AAAPPPAPPHHGAAPPQQLSPASPATAAPPAPAPTSAPGLQFACARQ-PELAMMHCSY
            . : . . **. : ** . . . . *****:*. *.:*****
```

	Sequence identities:	100%
wrasse	WEHETKHSALHTRIDI	
tilapia	WEHETKHSALHTRIDI	95%
flounder	WEHETKHSALHTRIDI	96%
trout	WDHESKHSALHARIDI	92%
chicken	WEHDSKHGALHSRIDI	79%
mouse	WDHDSKTGALHSRLDL	67%
	.::.* .***:*.**:.	

B

