

Csfoxo1a

[illegible]

Csfoxo3a

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31 T W P L R P E S G A G K P G T N D T D V I P E E D D D E
181 GAGGATGAGAGGAGGAGAGCTCTCAGAAAGCGAGCTGGTGTAAGTAAACCGGGAGATGAGCTGACGACGAGCGAGGGGGCTTCAGC
61 E D G G G G A A H K A S A G V S K P R E L S C S S G G F S
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Csfoxo3b

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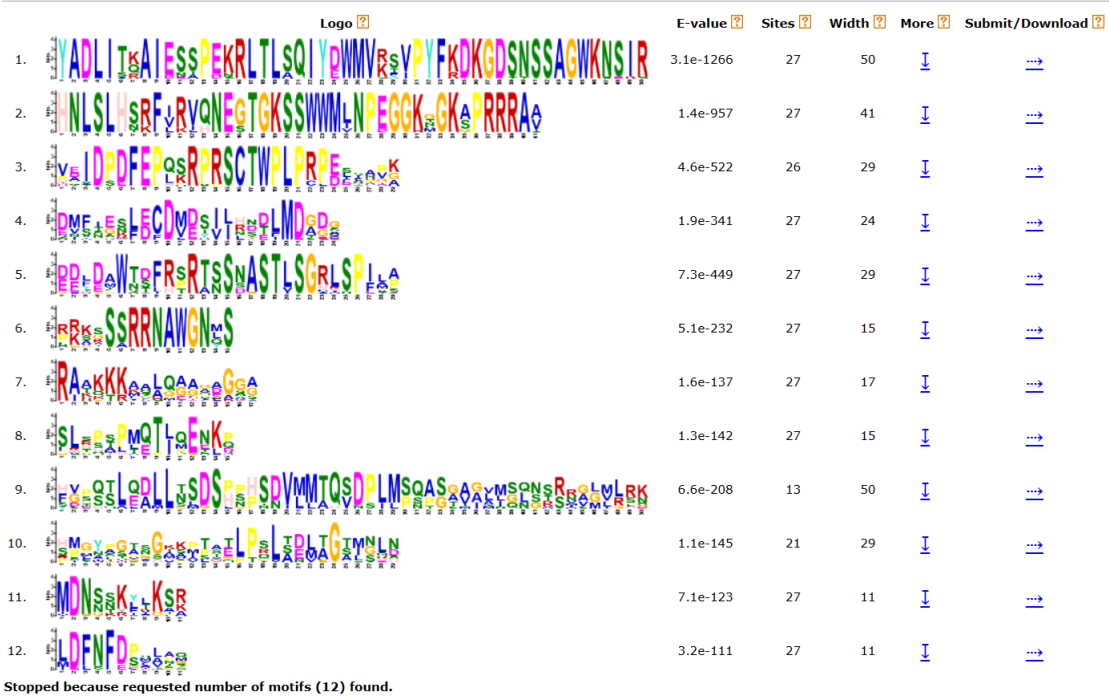
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241 S Q Q F P K W G V N S S S P S S R G S L D D S D M W T T F R
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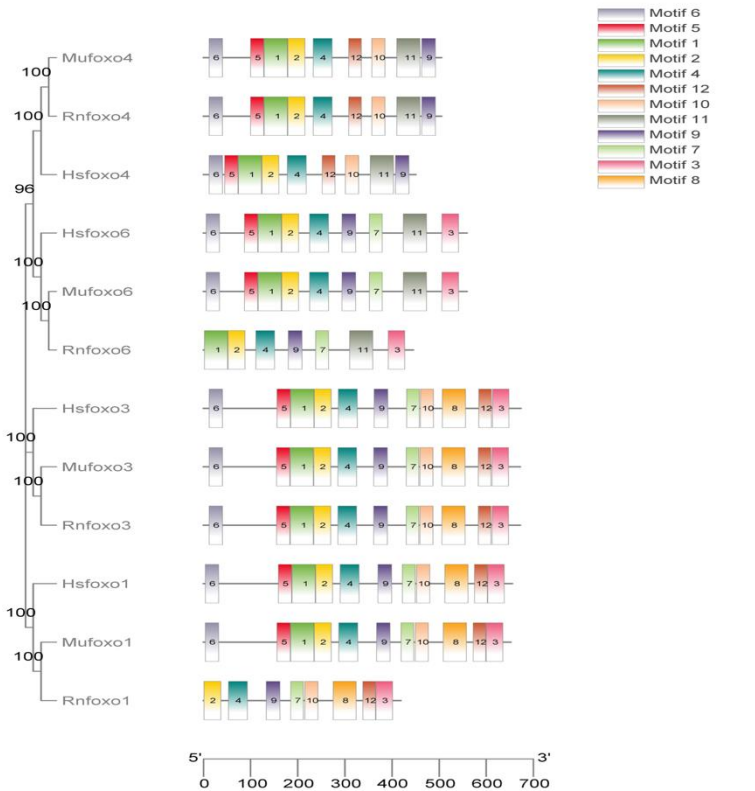
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91 CGGAGAGCTCTGGACCCGCGGCTTTAAACAGTCTCTCCCGGGCGCGTGGTGTCAGCAGGAGCTCGGAGGAAAGGCGCGAGTTTCATGACT
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211 G T G K S W W M L N P E G K N G K S P R R R A A S M D N
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601 D P A A A S H G F P Q R V K G N S H S W V S G *

Supplementary Figure S2 Putative motifs of foxo proteins



Supplementary Figure S3 The structure and motif analysis of Foxo proteins in three kind of mammals, mouse (Mmfoxo), humans (Hsfoxo) and Rattus norvegicus (Rnfoxo).



Supplementary Table S1

List of species used in this study

No.	Species name	Accession ID	Source
1	<i>Cynoglossus semilaevis</i>	XP_024912472.1	NCBI
		XP_008325121.1	
		XP_008309103.1	
		XP_008307478.1	
		XP_008320914.1	
		XP_008331716.2	
2	<i>Oryzias latipes</i>	XP_011489778.1	NCBI
		XP_023820018.1	
		XP_011480493.1	
		XP_023815809.1	
		XP_004076562.1	
		XP_023814834.1	
3	<i>Scophthalmus maximus</i>	XP_035474393.1	NCBI
		XP_035506031.1	
		XP_035479973.1	
4	<i>Danio rerio</i>	NP_001070725.2	NCBI
		NP_571160.1	
		NP_001009988.1	
		NP_001076326.1	
		XP_009289443.1	
		NP_001128604.2	
5	<i>Lepisosteus oculatus</i>	XP_690041.2	NCBI
		XP_006631437.1	
		XP_006626029.1	
		XP_015207025.1	
6	<i>Oreochromis niloticus</i>	XP_006628257.1	NCBI
		XP_005477409.1	
		XP_005467551.1	
		XP_025766550.1	
		XP_005454675.1	
		XP_003455269.2	
7	<i>Takifugu rubripes</i>	XP_003450195.1	NCBI
		XP_029699608.1	
		XP_029703679.1	
		XP_003978591.1	
		XP_003971932.1	
		XP_003969118.2	
		XP_011609846.1	

8	<i>Perca fluviatilis</i>	XP_039641440.1	NCBI
		XP_039638602.1	
		XP_039633989.1	
		XP_039668563.1	
9	<i>Hippoglossus hippoglossus</i>	XP_034456251.1	NCBI
		XP_034436699.1	
		XP_034432342.1	
10	<i>Mus musculus</i>	NP_062713.2	NCBI
		NP_001363896.1	
		NP_061259.1	
		NP_918949.1	
11	<i>Homo sapiens</i>	NP_001446.1	NCBI
		NP_002006.2	
		NP_001164402.1	
		NP_001278210.2	

Supplementary Table S2

Primers and their sequences in this study.

Primer	Sequence (5'-3')	Information
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Csfoxo1a-RT-R	AAAACTGGGCTTGCTCTCTGG	qRT-PCR
Csfoxo3a-RT-F	GAGGACGAGCCACCAAGAAA	qRT-PCR
Csfoxo3a-RT-R	GCTGAGGGTGCTGGCATTAGA	qRT-PCR
Csfoxo3b-RT-F	TTGCTTGTC AACATCAACCTG	qRT-PCR
Csfoxo3b-RT-R	TGAAGAGAAACCGTCGTGTG	qRT-PCR
Csfoxo4-RT-F	AGACGGTGCCTTACTTCAGAG	qRT-PCR
Csfoxo4-RT-R	GGTGCTTTCCAGTTTTC	qRT-PCR
Csfoxo6-like-RT-F	CAGTTATCATCCGACCGTC	qRT-PCR
Csfoxo6-like-RT-R	GCCTTGTTCTCTTGAATCGTCT	qRT-PCR
Csfoxo1a-like-RT-F	AGAGGAAGAGCCACGAAGAA	qRT-PCR
Csfoxo1a-like-RT-R	GCTGGTGCGTGTCTAA	qRT-PCR
β -actin-F	TTCCAGCCTTCCTTCCTT	qRT-PCR
β -actin-R	TACCTCCAGACAGCACAG	qRT-PCR
Csfoxo1a-P-F	ATCTGCGATCTAAGTAAGCTTGTGAAGCGTCCCAATA	promoter
Csfoxo1a-P-R	CAGTACCGGAATGCCAAGCTTGACAGCAGACGAGCACT	promoter
Csfoxo3a-P-F	ATCTGCGATCTAAGTAAGCTTGCCTTGTAGGGAGATT	promoter
Csfoxo3a-P-R	CAGTACCGGAATGCCAAGCTTAATCTGCTGCTGTGG	promoter

Csfoxo3b-P-F	ATCTGCGATCTAAGTAAGCTTTTTGATATTGTCCCAACTAG	promoter
Csfoxo3b-P-R	CAGTACCGGAATGCCAAGCTTGTCGGTGTCATGTGGA	promoter
Csfoxo4-P-F	ATCTGCGATCTAAGTAAGCTTGAGCCCTGACACGAAC	promoter
Csfoxo4-P-R	CAGTACCGGAATGCCAAGCTTAAAGTCAATGGACCACC	promoter
mufoxo1a-C/EBP α -F	AACACGTTTTAAAGGACGTTTAGCTTCTTAAGATAAC	binding site mutation
mufoxo1a-C/EBP α -R	GTTATCTTAAGAAGCTAAACGTCCTTTAAACGTGTT	binding site mutation
mufoxo1a-c-Jun-F	ATCTCATTATGAACTGACCTAATTCGTTT	binding site mutation
mufoxo1a- c-Jun -R	AAACGAATTAGGTCAGTTCATAATGAGAT	binding site mutation
mufoxo3a-C/EBP α -F	ATCGCAACATACGTGTTTAGGAAAAAAATGT	binding site mutation
mufoxo3a-C/EBP α -R	ACATTTTTTTCCTAAACACGTATGTTGCGAT	binding site mutation
mufoxo3a-c-Jun-F	TAACTTTGACTCTGAGACACAAAAAATGTCA	binding site mutation
mufoxo3a- c-Jun -R	TGACATTTTTTGTGTCTCAGAGTCAAAGTTA	binding site mutation
mufoxo3b-C/EBP α -F	ACTCGCCCTCTCTGACTGCTGTGAAGTTAA	binding site mutation
mufoxo3b-C/EBP α -R	TTAACTTCACAGCAGTCAGAGAGGGCGAGT	binding site mutation
mufoxo3b-c-Jun-F	CCTCACTGAGCGCTGTGAAGT	binding site mutation
mufoxo3b- c-Jun -R	ACTTCACAGCGCTCAGTGAGG	binding site mutation
mufoxo4-C/EBP α -F	GCAGAGCCAGATCCCTGACAGTGG	binding site mutation
mufoxo4-C/EBP α -R	CCACTGTCAGGGATCTGGCTCTGC	binding site mutation
mufoxo4-c-Jun-F	AGTTATCTGTGTGCATGGTTAATC	binding site mutation
mufoxo4- c-Jun -R	GATTAAACCATGCACACAGATAACT	binding site mutation
Csfoxo1a-siRNA-F1	CCCAGAUCUAUGACUGGAUTT	siRNA
Csfoxo1a-siRNA-R1	AUCCAGUCAUAGAUCUGGGTT	siRNA
Csfoxo1a-siRNA-F2	GCCAUCUAUGCCACUGCAATT	siRNA
Csfoxo1a-siRNA-R2	UUGCAGUGGCAUAGAUGGCTT	siRNA
Csfoxo1a-siRNA-F3	GCACAACCAGGCUAAGAAUTT	siRNA
Csfoxo1a-siRNA-R3	AUUCUUAGCCUGGUUGUCTT	siRNA
Csfoxo3a-siRNA-F1	GAGGAAGACAACGGAGUUATT	siRNA
Csfoxo3a-siRNA-R1	UAACUCCGUUGUCUCCUCTT	siRNA
Csfoxo3a-siRNA-F2	GACCAUUCAGGAGAACAAATT	siRNA
Csfoxo3a-siRNA-R2	UUUGUUCUCCUGAAUGGUCTT	siRNA
Csfoxo3a-siRNA-F3	GACUGUGACAUGGACUCUATT	siRNA
Csfoxo3a-siRNA-R3	UAGAGUCCAUGUCACAGUCTT	siRNA
Csfoxo3b-siRNA-F1	GACAACAGCAACAAGUACATT	siRNA
Csfoxo3b-siRNA-R1	UGUACUUGUUGCUGUUGUCTT	siRNA

Csfoxo3b-siRNA-F2	GAUGACCUGAAUGGAGAGUTT	siRNA
Csfoxo3b-siRNA-R2	ACUCAUCCAUAAGGUCAUCTT	siRNA
Csfoxo3b-siRNA-F3	GGACCGAUUCCCACAAGAUTT	siRNA
Csfoxo3b-siRNA-R3	AUCUUGUGGGAUUCGGUCCTT	siRNA
IGF1-RT-F	GTATCTCCTGTAGCCACACCTCT	qRT-PCR
IGF1-RT-R	GCCTCTCTCTCCACACAAAACCT	qRT-PCR
Fox12-RT-F	GAGAGGAAGGGCACTACTGGA	qRT-PCR
Fox12-RT-R	TGGTTGGAAGTGCGTG	qRT-PCR
nerul3-RT-F	CTGGTGTCTTAGCAGCCGTCCT	qRT-PCR
nerul3-RT-R	CCAGAACTCCAGCACTGACCC	qRT-PCR
tesk1-RT-F	GCAGAACTCTCTCACCCCAACA	qRT-PCR
tesk1-RT-R	CCAGACCAAAGTCCGTCACCA	qRT-PCR
wt1a-RT-F		qRT-PCR
wt1a-RT-R	ACCGCCGTTTCCCCTTAC	qRT-PCR
sox9a-RT-F	GGGCTGGTGGTGATGTGC	qRT-PCR
sox9a-RT-R	AAGAACCACACAGATCAAGACAGA	qRT-PCR
	TAGTCATACTGTGCTCTGGTGATG	