

<i>S. senegalensis</i> X2	-----MDKSTVWAPSLWLDIFDELVYDDNEDLNEDQWTLN FNYSQTDKLTAKERKDGWKITCQHVNGRFQCDSCYRTWSSVKVVVVFRYRLRGS--RGTV	93
<i>S. maximus</i>	-----MSRATDWVPALWLDTFSELLNEDNELYGDQWTLN FNYSRQNTVTNEERKRGWKVFCCHYTHANFRCGSCSKTWPSARVLVLFYRLQKN--RGTA	93
<i>F. heteroclitus</i>	-----MSRSTAAWIPAFWLDIFDELLYDDNELYGDVWTLN FNYNQTDDEV TND RKRGWKVYCHNAYGHFQCGSCRKTWPSARAVLLFRYRLQKG--RGTV	94
<i>L. calcarifer</i>	-----MSRSTDWVPALWLETFDELLCDDNELYGDQWTLN FNYSQSDKVTKEERKKGWKVYCHCAYGNFQCASCSTWPSARVVVLFYRLQRGRGRGT	95
<i>Homo sapiens</i>	-----MAGDTEVWKQMFQEL---MREVKPWHRWTLRPDKG---LLPNVLKPGWMQYQQWTFARFQCSSCSRNWASAQVLVLFHMNWSEEKSRGQV	84
<i>O. mykiss</i>	-----MDLQEWASILQNT---IEEHDIEDTWSIEFDSA---IIPHHPARGWQQYISGAFARFMCSKCKRTWPSKRVLVVFHMRLLE--DKGMV	80
<i>S. salar</i>	-----MDLQEWASILQNT---IEEHDIEDTWSIEFDNT---IIPDCQARGWQKYISGAFARFMCSKCRRTWPSKRVLVVFHMRLLE--DKGMV	80
<i>S. senegalensis</i> X1	-----MALSEWTRIFLVE---ANGVLHGDTWNLEFDPS---IRANSPEPGWKEYIRTT SARFQCTQCRRTWPSNRVMVIFHMSLLD--GNGRV	80
<i>D. labrax</i> X1	-----MEESKWT SIFQMK---AKNLKQGDSWSLEFDDS---LVPKRPNPCWKL CIGSTSARFSCTKCGRGWPSVRVKVVFHMRL LH--GHGTV	80
<i>M. saxatilis</i> X1	-----MEESKWT SIFQMK---AKNFKQGDSWSLEFDDS---LVPKRPNPCWKL CIGSTSARFNCTKCGRGWPSVRVKVVFHMRL LH--GHGTV	80
<i>S. aurata</i>	-----MAQTDWTTIFGDK---ATDLEQGDSWHLEFDDS---VEPKSPKPGWKEYIRNTGARFRCSKCGRSWPSNRVMVVFHMHLIS--GQGVV	80
<i>O. fasciatus</i>	-----MAQPEWTRMFEIK---TKNLKQGDSWRLEFDEN---LVPNRPNLCWKTYIRNTSGRFKCTECGRGWSSNRAMVVFHMRLIR--GEGIV	80
<i>P. fluviatilis</i>	MMSHFTSCLYTVQISCCLISSSATSNTDTRMAQPEWTCIFQMK---TKDLKQGDTWRLEFDEI---IVPDCPNPGWEQYIRNTCARFKCTKCGRGWPSNRVMVVFHMRLTS--GHGVV	111
<i>D. labrax</i> X2	-----MEWTSIFQMK---AESLKQGDSWRLEFDDS---LVPDCPNPGWEQYIRNTGARFKCTMCGRGWPSNRVMVVFHMRLSN--GQGIV	77
<i>M. saxatilis</i> X2	-----MEWTSIFQMK---TESLKQGDSWHLEFDDS---LVPDSPNPGWEQYIRNTGARFKCTVCRRGWPSNRVMVVFHMRLSN--GQGIV	77
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**Zinc-binding domain**

<i>S. senegalensis</i> X2	IMRPFRQMCRQCDSNRFNLPGFSDNAVEESLLRLFSKIWKNCYGVEEDSDD--NS	ENNSN KYTTKPHEASLCEACSQGICKQVEECV-----	178
<i>S. maximus</i>	VMRPFQGQTCRSCESDEFELPGFSL	EEVKHALLRLFSKIKKNCYGEADEYEGVGSSD---- IKKTKPHEKTLCEACKMGICAQDEESCSQDDD-----	181
<i>F. heteroclitus</i>	IMRPYGGACRRCQDGEFDFPGFSRKEVEHALLRLFSKIRKNCYGEDE--G	DEGSSTSST KVWTKPHEKSLCEACRQGICCCQEDE-----	176
<i>L. calcarifer</i>	IMRPFQGQTCRRCQDDMFELPGFFKKEVEEALLRLISKIRKNCYGEYDDDDDDGGSSACST	KVWTKPHEKTLCEACRMGICCCQDED-----	180
<i>Homo sapiens</i>	KMRVFTQRCKKCPQPLFEDPEFTQENISRILKNLVFRILKKCYRGRFQLI--EE	VPMIKD ISLEGPHNSDNCEACLQGF CAGPIQVTS LPPSQT PRVHSIYKVEEVVKPWASGENVYSYA	202
<i>O. mykiss</i>	KVKRYRQECKKCVQSTMEEPHFKTENIEVLLDKLVVKILVKCYEDAGE--NN	NPFHLE GRSDGPHEAAHCEACKH GICRQVTTKEQNE-----KYRNIW-----EMFNS-----	178
<i>S. salar</i>	KVKRYRQECKKCVQSTMEEPHFKTDSIEVLLLEKLVEKILVKCYNKDAGE--KN	IPFHL DGRSDGPHEAAHCEACKH GICRQVTTKET-----	165
<i>S. senegalensis</i> X1	KVRSFRQNCKKCTDAPMVDPRISAENITILMKNLVKKIRIKCYNEKLDQ--GH	YNHER- LVVKS PHEPDHCEGCREGICN RERDEVYES-----SAEYSVLCNKLKQMFTV-----	183
<i>D. labrax</i> X1	KVKPLGQQCKTCEGAPMEKPSVTSRNIDTLLDNLVEKIRIKCYHEDLVR--RN	KPFIS- HDVSRPHEPAHCEACTQGICTRR-----	159
<i>M. saxatilis</i> X1	KVKALGQQCKTCDGAPMEKPSVTSRNIDILLDTLVEKIRIKCYHENLVR--RN	KPFIS- RDVTRPHEPAHCEACAQGICTRR-----	159
<i>S. aurata</i>	KVRRIRQNCKKCASAPMEKPEIPPENISILMDNLVKKIRIKCYGENLDG--G	FKPPQT- LEVKSPHEPAHCEACKLGICERN SAPHNPS-----TYKFFF-----	172
<i>O. fasciatus</i>	KVRPLRQKCKMCNEAPMEKPSITS	ENIGILL ENLVEKIRIKCYHENLGR--KIRHFRS- LDLNNPHEPAHCEACMQGICTRS-----	159
<i>P. fluviatilis</i>	KVRPFCQNCKQCSDAPMEKPKITS	ENIDILL ENLVEKIRIKCYHEDLGK--GHRPFIS- LDVKS PHEPAHCEACIAGICTRN-----	190
<i>D. labrax</i> X2	KVRRFRQNCKMCTEAPMEMPEIDSENINILL ENLVEKIRIKCYHEDLGR--GN	RPFVN- LEVKSPHEPAHCEACKQGICARS-----	156
<i>M. saxatilis</i> X2	KVRRFRQNCKMCTNAPMEMPDIESEN	IHILL ENLVEKIRM KCYHEDLGR--VNRPFVN- LEVKSPHEPAHCEACKQGICARS-----	156
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<i>S. senegalensis</i> X2	-----	178
<i>S. maximus</i>	-----	181
<i>F. heteroclitus</i>	-----	176
<i>L. calcarifer</i>	-----	180
<i>Homo sapiens</i>	CQNHICRNLSIFCCCVILIVIVVIVVKTAI	232
<i>O. mykiss</i>	-----	178
<i>S. salar</i>	-----	165
<i>S. senegalensis</i> X1	-----	183
<i>D. labrax</i> X1	-----	159
<i>M. saxatilis</i> X1	-----	159
<i>S. aurata</i>	-----	172
<i>O. fasciatus</i>	-----	159
<i>P. fluviatilis</i>	-----	190
<i>D. labrax</i> X2	-----	156
<i>M. saxatilis</i> X2	-----	156

## Percent Identity

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
	67.9	34.2	35.2	34.6	48.4	66.7	46.5	32.9	50.9	34.0	59.1	68.6	93.7	66.0	1	<i>D. labrax</i> X1
		33.6	39.7	33.3	51.3	71.8	50.6	34.2	60.3	32.7	69.9	78.8	66.7	92.9	2	<i>D. labrax</i> X2
			28.8	76.6	31.6	33.5	32.3	67.8	34.4	60.6	33.1	34.2	33.5	34.2	3	<i>F. heteroclitus</i>
				31.5	34.3	35.2	35.2	32.3	32.2	31.3	33.7	36.6	34.0	39.1	4	<i>H. sapiens</i>
					31.5	33.3	30.9	72.4	34.8	61.9	34.2	34.6	34.0	33.3	5	<i>L. calcarifer</i>
						42.1	89.7	30.9	39.0	33.5	43.6	49.1	47.2	51.3	6	<i>O. mykiss</i>
							41.5	30.3	53.5	32.7	59.7	73.0	66.0	69.9	7	<i>O. fasciatus</i>
								31.7	40.9	33.5	42.1	48.4	45.3	50.6	8	<i>S. salar</i>
									30.5	56.2	32.9	32.9	31.0	34.2	9	<i>S. maximus</i>
										31.9	58.1	60.4	50.9	59.6	10	<i>S. senegalensis</i> X1
											31.9	31.4	33.3	32.7	11	<i>S. senegalensis</i> X2
												67.3	59.1	67.9	12	<i>S. aurata</i>
													66.7	76.3	13	<i>P. fluviatilis</i>
														64.7	14	<i>M. saxatilis</i> X1
															15	<i>M. saxatilis</i> X2