

Human	MSTASSSSSSSSSQTTPHPPSQMRRSAAAGSPFAVAAAGSGNGAGGGGGVGCAPAAGAGRL
Mouse	MSTASSSS----SQTPHSAPQMRRS TAGSP--AAAGSGTGPAG----SCAPAAGAGRL
Zebrafish	MSASPVHS-----ARVRRSNDGSPINTSSSASSS-----SSSSTGNTSR
Human	LQPIRATVPYQLLRGSQHSPTRPVAAA-----AASLGSLPGPGAARGPSPSSPTPPAA
Mouse	LQPIRATVPYQLLRGSQHSPTRPAAAAAT----AAAALGSLSGPGGARGPSPSSPTPPA
Zebrafish	LQPIRATVPYQLLRGNQHSPTREPASFSTPSSSSSI SVGSNTEPTASAQHSNSTPGSETL
Human	AAPAEQAP---RAKGRPRRSPESHRRSSSPERRSPGSPVCR-ADKAKSQVRTSSTIRRT
Mouse	AAPAEQAP---RAKGRPRRSPESRRSSSPERRSPGSPVCR-VDRPKSQHIRTSSTIRRT
Zebrafish	ASPAGSASLDGRLIPRQRSPPEHR--SSPER-CPHSFVLAVERSKSQVVRTGAIARRT
Human	SSLDTTITGPYLTGQWPRDPHVHYPSCKDKATQTPSCWAEEGAERKRS-HQRSASWGSADQ
Mouse	SSLDTTITGPYLTGQWPRDPHVHYPSCKMRDKATQTPSCWAEEGAERKRS-HQRSASWGSADQ
Zebrafish	SSLGAIITGPYLIGQWPRESHLNPLCMKDKSTQTPGCWSESEEKRS THQRSASWGSADH
Human	LKEQIAKLRLQQRSKQSS-RHSKE-KDRQSPHGNHITISHTQATG-----SRS
Mouse	LKE-IAKLRLQQRSKQSS-RHSKE-KDRQSPHGNHITISHTQAIG-----SRS
Zebrafish	LKE-IAKLRLQQRNKQGGGRQCKDSKECLSPHCCSTTTITATTISTASQAPSSMSKS
Human	VMPLSNISVPKSSVSRVPCNVEGISPELEKVFIKENNGKEEVSKPLDIPDGRRAPLPAH
Mouse	VMPLSNISVPKSSVSRVPCNVEGISPELEKVFIKENNGKEEVSKPLDIPDGRRAPLPAH
Zebrafish	AQMPLSNITVPKPSISRVPSSMEGINHELEKVFIKDNGEKEEL-KALEVPDGRRAPFPQ
Human	YRSSSTRSIDTQTPSVQERSSSCSSHSPCVSPFCPPESQDGSPCSTEDLLYDRDKD SGSS
Mouse	YRSSSTRSIDTQTPSVQERSSSCSSHSPCVSPFCPPESQDGSPCSTEDLLYDRDKD SGSS
Zebrafish	QRSSSSRGIDTQTPSVQGRSSSCSSLSPCPS PACPPRSHDGSFYSTDEMLDDRDKD SGSS
Human	SPLPKYASSPKPNNSYMFKRE PPEGCERVKVFEE MASRQPI SAPLFSCPDKNKVNFIPTG
Mouse	SPLPKYASSPKPNNSYMFKRE PPEGCERVKVFEE MASRQPI SAPLFSCPDKNKVNFIPTG
Zebrafish	SPLPKFASSPKPNNSYMFKRE PPEGCEKIKVFEEMTSRQSTTVPLFSCPDKNKVNFIPTG
Human	SAFCPVKLLGPLL PASDLMLKNSPNSGQSSALATLTVEQLSSRVSFTSLSDDTSTAGSME
Mouse	SAFCPVKLLGPLL PASDLMLKNSPNSGQSSALATLTVEQLSSRVSFTSLSDDTSTADSLE
Zebrafish	SAFCPVKLPGSM LQHS SSQDEERE-PTQAGPSALHHMPTQVSTSTSTDDP-----
Human	ASVQQPSQQQQLLQELQGEDHISAQNYV I I
Mouse	PSAQQPSQQQQLLQDLQVEEHVSTQNYVMI
Zebrafish	--PESPSQQ---QEAPSESGSQPNFEVS

Supplementary Figure.1

Alignment of amino acid sequences of human, mouse and zebrafish Glcci1 predicted from their nucleotide sequences. The amino acid same with human, mouse and zebrafish are marked by shading.

Supplementary Table 1. Identification of protein sequences in peptides obtained from the 70 kDa and 150 kDa protein fractions in the urine of proteinuric zebrafish embryos using mass spectrometry sequencing. Only the 10 most prominent peptide sequences identified in each fraction are shown.

A. 150 kDa fraction		
Accession	Protein name	Hits
Q1LWN5_DANRE	Novel protein similar to vitellogenin 1 Vg1 Flags Fragment	420
A2VCZ6_DANRE	Zgc 136383 protein Flags Fragment	433
Q1LWN2_DANRE	Vitellogenin 1	383
Q1LWN4_DANRE	Novel protein similar to vitellogenin 1 Vg1 Flags Fragment	328
Q90YN8_DANRE	Vitellogenin 1	369
Q8JH37_DANRE	Vitellogenin 1 Flags Fragment	294
Q1LWN1_DANRE	Novel protein similar to vitellogenin 1 Vg1 Flags Fragment	294
A8WGJ7_DANRE	Zgc 136383 protein Flags Fragment	315
A4VCF4_DANRE	Vtg1 protein Flags Fragment	240
A3KMS4_DANRE	Vtg7 protein	269
B. 70 kDa fraction		
Accession	Protein name	Hits
Q1LWN5_DANRE	Novel protein similar to vitellogenin 1 Vg1 Flags Fragment	586
A2VCZ6_DANRE	Zgc 136383 protein Flags Fragment	597
Q1LWN2_DANRE	Vitellogenin 1	557
Q90YN8_DANRE	Vitellogenin 1	535
Q1LWN4_DANRE	Novel protein similar to vitellogenin 1 Vg1 Flags Fragment	473
Q8JH37_DANRE	Vitellogenin 1 Flags Fragment	385
Q1LWN1_DANRE	Novel protein similar to vitellogenin 1 Vg1 Flags Fragment	380
A4VCF4_DANRE	Vtg1 protein Flags Fragment	330
Q1MTC6_DANRE	Novel protein similar to vitellogenin 1 Vg1	422
Q1MTC4_DANRE	Novel protein similar to vitellogenin 1 Vg1	244

Supplementary Table 2. Identification of protein sequences in peptides obtained from the 70 kDa and 150 kDa protein fractions in the serum of adult wild type zebrafish using mass spectrometry sequencing. Only the 10 most prominent peptide sequences identified in each fraction are shown.

A. 150kDa fraction

Accession	Protein name	Hits
IPI00508594	vtg1;vtg5 Vitellogenin 1	228
IPI00919379	vtg7 149 kDa protein	215
IPI00975348	vtg7 149 kDa protein	223
IPI00858854	vtg6 vitellogenin 6	209
IPI00866006	vtg7 Vtg7 protein	191
IPI00920458	vtg7 124 kDa protein	157
IPI00503804	vtg3 vitellogenin 3, phosvitinless	67
IPI00500668	vtg2 Novel protein similar to vitellogenin 1	62
IPI00615908	Novel protein similar to complement component 3	42
IPI00506519	cp Ceruloplasmin	49

B. 70kDa fraction

Accession	Protein name	Hits
IPI00972722	tfa Transferrin	154
IPI00505602	Complement component c3b	56
IPI00773000	fetub fetuin B	54
IPI00513243	lmnb2 Lamin B2	39
IPI00835213	si:dkey-76b14.4 185 kDa protein	41
IPI00963174	si:dkey-76b14.4 Novel protein	40
IPI00864674	191 kDa protein	34
IPI00975348	vtg7 149 kDa protein	21
IPI00858854	vtg6 vitellogenin 6	20
IPI00866006	vtg7 Vtg7 protein	21