

FIGURE 3

Table of Biological Significance of SNP Genes

Gene with SNP	False Discovery Rate			Single Nucleotide Polymorphism			Genotyping Data
	Muscle Percentage	Fat Percentage	Color	Major Allele	Minor Allele	MAF	
VDAC2	4.39×10^{-5}	3.00×10^{-3}	3.00×10^{-3}	G	T	0.19	32/266/573
CYFIP1	0.008	0.776	0.775	A	C	0.22	30/315/526
CYFIP2	0.008	1	1	T	C	0.10	3/167/700
Taxilin beta muscle derived 77 like	0.038	0.46	0.46	A	G	0.31	78/388/405
EIF3I	0.16	0.008	0.14	A	G	0.27	66/325/459
EIF3I	0.18	0.016	0.016	A	G	0.30	87/350/425

This table shows the analytical results of the association between 41 validated nuclear SNPs and three traits (percent muscle mass, percent fat content, and percent color absorbance). The analysis was completed with PLINK genetic toolset in a population of 871 fish. These seven markers were each associated with at least one trait. Low false discovery rates indicate probable associations and are shaded deep red in this table. For each polymorphism, the major and minor alleles are designated and assigned color for contrast: yellow for adenine, green for guanine, blue for cytosine, and red for thymine. Each minor allele frequency [MAF] is also shown, with darker shading corresponding to greater frequency. Genotyping data for each SNP is given (number of individuals homozygous for major allele / number of heterozygous individuals / number of individuals homozygous for minor allele).