

## **SUPPLEMENTARY INFORMATION**

**for manuscript**

**Pharmacogenomic analysis of retinoic-acid induced dyslipidemia in congenic rat model**

**Michaela Krupková<sup>1</sup>, František Liška<sup>1</sup>, Lucie Šedová<sup>1</sup>, Drahomíra Křenová<sup>1</sup>, Vladimír  
Křen<sup>1</sup>, Ondřej Šeda<sup>1,2</sup>**

<sup>1</sup>Institute of Biology and Medical Genetics, the First Faculty of Medicine, Charles University and the General Teaching Hospital, Prague, Czech Republic

<sup>2</sup>Institute of Molecular Genetics of the Academy of Sciences of the Czech Republic, Vídeňská 1083, 142 20 Prague 4, Czech Republic

**Address for correspondence:**

Ondřej Šeda, MD, PhD

Institute of Biology and Medical Genetics, First Faculty of Medicine,

Charles University in Prague,

Albertov 4, 12800 Prague 2, Czech Republic

Phone: (4202) 2496 8147; Fax: (4202) 2491 8666; email: [osed@lf1.cuni.cz](mailto:osed@lf1.cuni.cz)

**Supplementary Table.** Two-way ANOVA for triacylglycerol, cholesterol concentrations in 20 lipid subfractions (F1-F20) and lipoprotein particle size.

<b>Phenotype</b>	<b>STRAIN</b>	<b>ATRA</b>	<b>S*ATRA</b>
<b>Triacylglycerol (TG)</b>			
F1 (CM)	<i>0.52</i>	<b>&lt;0.0001</b>	<b>&lt;0.0001</b>
F2 (CM)	<i>0.80</i>	<b>&lt;0.0001</b>	<b>0.0002</b>
F3 (large VLDL)	<i>0.88</i>	<b>0.0002</b>	<b>0.0012</b>
F4 (large VLDL)	<i>0.55</i>	<b>0.020</b>	<b>0.033</b>
F5 (large VLDL)	<i>0.28</i>	<i>0.07</i>	<i>0.35</i>
F6 (medium VLDL)	<i>0.18</i>	<b>0.008</b>	<i>0.95</i>
F7 (small VLDL)	<i>0.41</i>	<b>0.0001</b>	<i>0.24</i>
F8 (large LDL)	<i>0.91</i>	<b>&lt;0.0001</b>	<b>0.0044</b>
F9 (medium LDL)	<i>0.27</i>	<b>0.0031</b>	<i>0.19</i>
F10 (small LDL)	<i>0.71</i>	<i>0.91</i>	<i>0.13</i>
F11 (very small LDL)	<i>0.83</i>	<i>0.39</i>	<i>0.13</i>
F12 (very small LDL)	<b>&lt;0.0001</b>	<b>0.016</b>	<b>0.003</b>
F13 (very small LDL)	<i>0.98</i>	<i>0.22</i>	<i>0.44</i>
F14 (very large HDL)	<i>0.06</i>	<b>&lt;0.0001</b>	<b>&lt;0.0001</b>
F15 (very large HDL)	<b>0.0015</b>	<b>0.0015</b>	<b>0.038</b>
F16 (large HDL)	<b>0.019</b>	<b>0.0003</b>	<b>0.004</b>
F17 (medium HDL)	<i>0.13</i>	<b>0.0016</b>	<b>0.003</b>
F18 (small HDL)	<i>0.39</i>	<b>0.027</b>	<i>0.06</i>
F19 (very small HDL)	<i>0.19</i>	<b>0.023</b>	<b>0.047</b>
F20 (very small HDL)	<i>0.93</i>	<b>0.008</b>	<b>0.041</b>

<b>Phenotype</b>	<b>STRAIN</b>	<b>ATRA</b>	<b>S*ATRA</b>
<b>Cholesterol (C)</b>			
F1 (CM)	<i>0.59</i>	<b>0.0004</b>	<b>0.0013</b>
F2 (CM)	<i>0.28</i>	<b>0.0001</b>	<b>0.0004</b>
F3 (large VLDL)	<i>0.28</i>	<b>&lt;0.0001</b>	<b>0.0002</b>
F4 (large VLDL)	<i>0.52</i>	<b>0.0002</b>	<b>0.0005</b>
F5 (large VLDL)	<i>0.79</i>	<b>0.0002</b>	<b>0.0031</b>
F6 (medium VLDL)	<i>0.97</i>	<b>&lt;0.0001</b>	<b>0.019</b>
F7 (small VLDL)	<i>0.07</i>	<b>0.0012</b>	<b>0.0056</b>
F8 (large LDL)	<i>0.15</i>	<b>0.0078</b>	<b>0.0034</b>
F9 (medium LDL)	<i>0.56</i>	<i>0.09</i>	<i>0.06</i>
F10 (small LDL)	<b>0.016</b>	<i>0.06</i>	<i>0.55</i>
F11 (very small LDL)	<b>0.040</b>	<i>0.17</i>	<i>0.67</i>
F12 (very small LDL)	<b>0.006</b>	<b>0.014</b>	<i>0.06</i>
F13 (very small LDL)	<b>0.0031</b>	<b>0.0035</b>	<i>0.18</i>
F14 (very large HDL)	<i>0.18</i>	<b>0.0031</b>	<i>0.94</i>
F15 (very large HDL)	<b>&lt;0.0001</b>	<i>0.07</i>	<i>0.72</i>
F16 (large HDL)	<b>0.0027</b>	<i>0.15</i>	<i>0.57</i>
F17 (medium HDL)	<i>0.84</i>	<i>0.18</i>	<i>0.70</i>
F18 (small HDL)	<i>0.13</i>	<i>0.13</i>	<b>0.031</b>
F19 (very small HDL)	<i>0.57</i>	<i>0.66</i>	<i>0.23</i>
F20 (very small HDL)	<i>0.47</i>	<i>0.27</i>	<i>0.13</i>

The significance levels of two-way ANOVA's STRAIN, ATRA and STRAIN\*ATRA (S\*ATRA) factor interactions are shown (significant p values in bold, non-significant in italics).