

## Supplemental Material

### **Leukocyte trafficking-associated vascular adhesion protein 1 is expressed and functionally active in atherosclerotic plaques**

Johanna M.U. Silvola<sup>1,+</sup>, Helena Virtanen<sup>1,2,+</sup>, Riikka Siitonen<sup>1</sup>, Sanna Hellberg<sup>1</sup>, Heidi Liljenbäck<sup>1,3</sup>, Olli Metsälä<sup>1</sup>, Mia Ståhle<sup>1</sup>, Tiina Saanijoki<sup>1</sup>, Meeri Käkelä<sup>1</sup>, Harri Hakovirta<sup>4</sup>, Seppo Ylä-Herttuala<sup>5</sup>, Pekka Saukko<sup>6</sup>, Matti Jauhiainen<sup>7</sup>, Tibor Z. Veres<sup>8</sup>, Sirpa Jalkanen<sup>8</sup>, Juhani Knuuti<sup>1,2</sup>, Antti Saraste<sup>1,2,9,10</sup>, and Anne Roivainen<sup>1,2,3,\*</sup>

<sup>1</sup>Turku PET Centre, University of Turku, FI-20521 Turku, Finland

<sup>2</sup>Turku PET Centre, Turku University Hospital, FI-20521 Turku, Finland

<sup>3</sup>Turku Center for Disease Modelling, University of Turku, FI-20520 Turku, Finland

<sup>4</sup>Department of Vascular Surgery, Turku University Hospital and University of Turku, FI-20520 Turku, Finland

<sup>5</sup>A. I. Virtanen Institute for Molecular Sciences, University of Eastern Finland, FI-70211 Kuopio, Finland

<sup>6</sup>Department of Pathology and Forensic Medicine, University of Turku, FI-20520 Turku, Finland

<sup>7</sup>National Institute for Health and Welfare, Genomics and Biomarkers Unit, Biomedicum, FI-00251 Helsinki, Finland

<sup>8</sup>MediCity Research Laboratory and Department of Medical Microbiology and Immunology, University of Turku, FI-20520 Turku, Finland

<sup>9</sup>Heart Center, Turku University Hospital, FI-20520 Turku, Finland

<sup>10</sup>Institute of Clinical Medicine, University of Turku, FI-20520 Turku, Finland

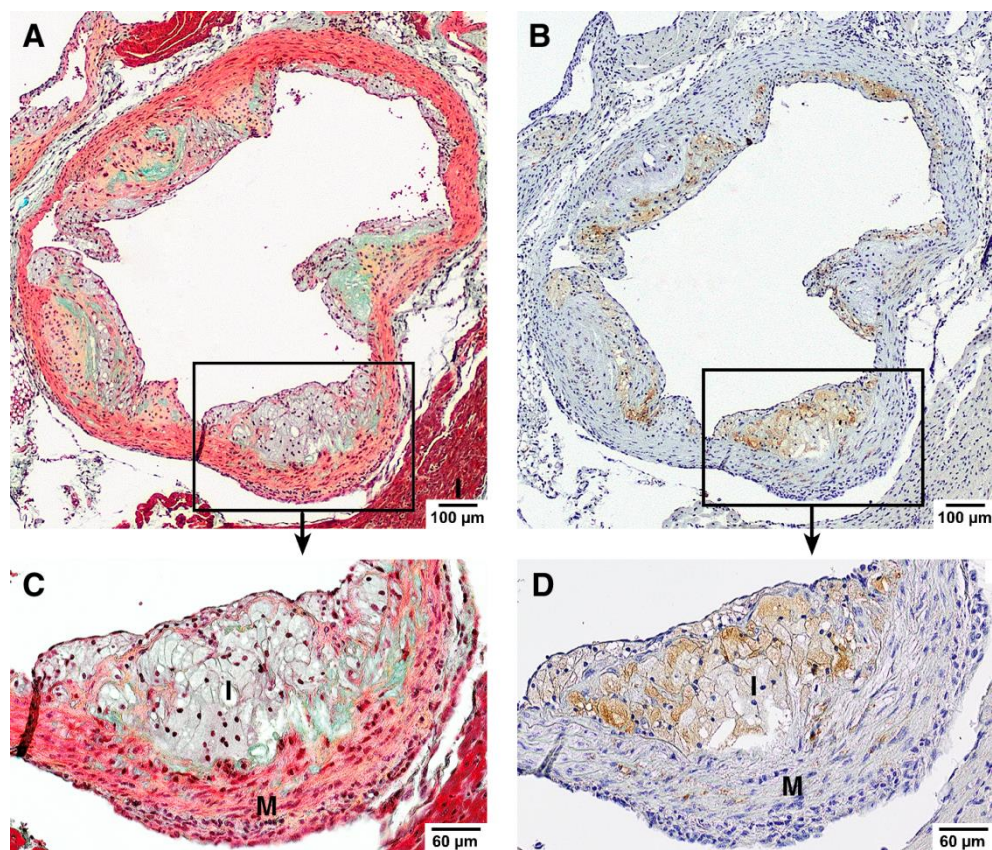
\*corresponding author E-mail: anne.roivainen@utu.fi

+these authors contributed equally to this work

**Table S1. Plasma lipid levels of LDLR<sup>-/-</sup>ApoB<sup>100/100</sup> mice treated with VAP-1 inhibitor LJP1586 or saline**

	VAP-1 inhibitor LJP1586 ( <i>n</i> = 15)	Saline ( <i>n</i> = 10)	<i>P</i> value
Body weight, g	28 ± 4.5	25 ± 4.3	0.065
fP-Cholesterol	8.8 ± 2.2	8.8 ± 1.3	0.99
fP-HDL-cholesterol	1.0 ± 0.25	1.0 ± 0.25	0.87
fP-LDL-cholesterol	7.1 ± 2.1	7.0 ± 1.4	0.83
fP-Triglycerides	1.5 ± 0.35	1.8 ± 1.0	0.24

Values are expressed as mean ± SD with two significant figures. LDLR<sup>-/-</sup>ApoB<sup>100/100</sup>, low-density lipoprotein receptor-deficient mouse expressing only apolipoprotein B100; VAP-1, vascular adhesion protein-1; fP, fasting plasma; HDL, high-density lipoprotein; LDL, low-density lipoprotein. Concentrations of lipids are expressed as mmol/L. *P* values, non-paired *t* test.



**Figure S1** Characterization of atherosclerotic plaques in  $LDLR^{-/-}ApoB^{100/100}$  mice. The aortas of  $LDLR^{-/-}ApoB^{100/100}$  mice contained atherosclerotic plaques, mostly of the fibroatheroma type with a well-defined fibrous cap. Representative formalin-fixed, paraffin-embedded aortic root sections stained with (A and C) Movat's pentachrome (black = nuclei; yellow = collagen, reticular fibers; blue = ground substance, mucin; bright red = fibrin; red = muscle) or with (B and D) anti-mouse Mac-3 immunohistochemistry in  $LDLR^{-/-}ApoB^{100/100}$  mice. Mac-3 positive macrophages are represented by the brown color in images B and D. I = intima; M = media.