

Associations with phenotype
Asthma
Immune response: <i>FOXP3(67)</i> , <i>INF-g(67)</i> , <i>STAT5A(68)</i> , <i>CRIP1(68)</i> , <i>IL-4R(69)</i>
NO synthesis: <i>ARG2(70)</i>
Lipid pathway: <i>ALOX12(71)</i> , <i>ASCL3(72)</i>
Pharmacologic receptor: <i>ADRB2(73)</i>
Atopy
Immune response: <i>TLSP(74)</i>
Lipid pathway: <i>PTGDR(75)</i>
Xenobiotics: <i>CYP26A1(76)</i>
Various: <i>58 genes (77)</i>
Associations with environmental exposure
Tobacco smoke
Immune response: <i>TGFB3(78)</i>
Xenobiotic metabolism: <i>AHRR(79)</i> , <i>CYP1A1(79)</i>
Signaling: <i>NPSR1(80)</i> , <i>GFI1(79)</i> , <i>PTPRO(78)</i>
Oncogenes: <i>SPDEF(78)</i> , <i>SNCG(78)</i> , <i>AXL(78)</i> , <i>MET(78)</i> , <i>NBL1(78)</i> , <i>KLK11(78)</i>
Farming
Immune response: <i>STAT6(82)</i> , <i>RAD50(82)</i> , <i>IL13(82)</i> , <i>IL4(82)</i> , <i>CD14(81)</i>
Sphingolipid synthesis: <i>ORMDL1(82)</i>
Pollution
Immune response: <i>FOXP3(83)</i> , <i>IFN-g(83)</i> , <i>CTLA-4(84)</i> , <i>IL-10(84)</i> , <i>IL1-R2(84)</i> , <i>IFN-g(85)</i>
NO synthesis: <i>NOS2A(86)</i> , <i>NOS3(86)</i> , <i>iNOS(87)</i>
Lipid Pathway: <i>ASCL3(72)</i>
Xenobiotics metabolism: <i>CYPBRD1(84)</i>
Signaling: <i>CLK2(84)</i> , <i>MAP3K7(84)</i> , <i>PIK3CG(84)</i>
DNA-binding: <i>ZNF445(84)</i> , <i>PHF20L1(84)</i> , <i>TRPS1(84)</i>
Pet keeping
Immune response: <i>CD14(88)</i>

Epigenes identified by candidate gene approach are shown in red and those from genome-wide approach are shown in blue.