

Table E6. Genes downregulated by IL3IgG- versus IL5IgG-activated eosinophil conditioned medium and control media (medium only and rhIL3IgG) in fibroblasts.

Gene	Protein	Brief description	Regulators-Networks (IPA analyses)
ABCA13	ATP-binding cassette, sub-family A (ABC1), member 13	Transmembrane movement	Network 2: cellular movement (Figure E2)
BMP3 (secreted)	bone morphogenetic protein 3	Bind TGF- β receptors- Suppresses TGF- β receptor availability	Network 1: development disorder (Figure E1)
BTBD18	BTB (POZ) domain containing 18	Protein ubiquitination	
CA14	carbonic anhydrase XIV	Reversible hydration of CO ₂	
CAPSL	calcyphosine-like	Calcium ion binding	
CCDC169	coiled-coil domain containing 169		
CHDH	choline dehydrogenase	Amine and ployamine biosynthesis	
DCC	DCC netrin 1 receptor	Axon guidance- FAK pathway- Induces apoptosis- Tumor suppressor	
DDN	dendrin	Promote apoptosis and polymerase II activity	
DRD1	dopamine receptor D1	Activates cAMP/AMPK pathways- Neuronal growth	
ERBB3 (secreted)	v-erb-b2 avian erythroblastic leukemia viral oncogene homolog 3	Inhibits or activates neuregulin signal	Target molecule (Table 2); Regulated by OSM, Akt (Table 3); Networks: immune response (inhibitor); Network 1: development disorder, neurological disease
GPR3	G protein-coupled receptor 3	Activates cAMP- APP generation	
INAFM2	InaF-motif containing 2		
KRT33A	keratin 33A, type I	Hair and nail formation	
LGALS1	lectin, galactoside-binding-like		
MBP	myelin basic protein	Signaling in T-cells and neuronal cells	Target molecules (Table 2); Regulated by JUN, IKBKB, APP (Tables 3 and E3)
MGAT5B	mannosyl (alpha-1,6-)-glycoprotein beta-1,6-N-acetyl-glucosaminyltransferase, isozyme B	Neurite outgrowth by integrin interaction with ECM proteins	
NLR4	NLR family, CARD domain containing 4	Part of the inflammasome	
NNAT	neuronatin	Nervous system development- Regulatory subunit of ion channels	
NSG1	neuron specific gene family member 1	Modulates amyloidogenic processing	
ODF3L1	outer dense fiber of sperm tails 3-like 1		
PDE6G	phosphodiesterase 6G, cGMP-specific, rod, gamma	Regulates c-Src protein kinase and GRK2	
PLCH2	phospholipase C, eta 2	Formation of IP ₃ , DAG, and the neuronal network	
PLSCR2	phospholipid scramblase 2	Role in coagulation and apoptosis	
PPIAL4F	peptidylprolyl isomerase A (cyclophilin A)-like 4F		
PPL	periplakin	Part of Akt1-mediated signaling	Regulated by CEBPA (Table E3)
RAET1E	retinoic acid early transcript 1E	Ligand for NKG2D- Role in the immune response	
RIBC1	RIB43A domain with coiled-coils 1		
SLC22A1	solute carrier family 22 (organic cation transporter)	Inhibited by PKA, activated by calmodulin complex	Networks: lipid metabolism
SPATA1	spermatogenesis associated 1		
SPATA9	spermatogenesis associated 9		
SPON1 (secreted)	spondin 1, extracellular matrix protein	Cell adhesion- Major factor for vascular smooth muscle cell growth	Network 2: cellular movement
SPRY3	sprouty homolog 3 (Drosophila)	Antagonist of fibroblast growth factor pathways- Negatively modulate respiratory organogenesis	
TAS2R31	taste receptor, type 2, member 31		
TLR1	toll-like receptor 1	Pathogen recognition and activation of innate immunity- Acts via MYD88	Networks: immune response. Network 1: inflammatory response
TMC3	transmembrane channel-like 3		
ZNF575	zinc finger protein 575		