

Supplementary Material

Shufeng Jiedu Capsules Alleviate Lipopolysaccharide-Induced Acute Lung Inflammatory Via Activation of GPR18 by Verbenalin

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Supplemental Table 1. Compounds identified in Shufeng Jiedu capsules.

Arginine
Cytidine
Sucrose and its isomer
Cafferic acid
Epigoitrin/Goitrin
Adenosine
Uridine
Guanosine
Phenylalanine
2-methoxy-3,4,5-trihydroxyphenylethanoid glycoside
Forsythoside E and its isomer
Forsythoside E and its isomer
Dehydroxy patrinoside
p-Coumaroyl-(6-O-caffeoyl)-glucoside
Hastatoside
Chlorogenic acid
3,4-dihydroverbenalin
Verbenalin
9-methyl-10-hydrohastatoside
Patridoid II
Dihydro patrinoside
b-hydroxyforsythoside A
Luteolin 7-O-diglucuronide
Resveratrol glycosides
Forsythoside J
Forsythoside A
Forsythoside I
Lutin
Apiosyl-isoliquiritin
Verbascoside
Liquiritin
Dimer piceid
Calceolarioside A
Naringenin 7-O-glucuronide
Isoverbascoside
dihydroxyphillyrin
Quercetin 7-O-rhamnosyl , 3-O-glucosyl
-1-6-rhamninosyl-1-3-rhamnoside
Hydroxydihydromatairesinoside
Apigenina-7-O-glucuronide

Isochlorogenic acid B and its isomer

Emodin-8-O-glucoside

Apiosylliguiritin

7-methoxyflavone-4'-glucoside

Epimeridinoside A

Isolariciresinol-6-O-b-glucoside

5-hydroxymethylfurfural

3-(2'-hydroxyphenyl)-4(3H)-quinazolinone

Trihydroxybenzaldehyde

Kaempferide-3-O-rhamninoside

2-methoxy-6-acetyljuglone-glucoside

Emodin-1-O-glucoside

Isoliquiritigenin

Hydroxy glycyrrhizic acid and its isomer

Rhein

Hydroxy glycyrrhizic acid and its isomer

7-methoxyisohamnetin

Emodin

Apigenin

Demethoxy-Indigoticalignane A

4'-hydroxywogonin

Hydroxy glycyrrhizic acid and its isomer

Saikosaponin A

glycyrrhizic acid and its isomer

glycyrrhizic acid and its isomer

2-[(2'-hydroxy-2',3'-dihydro-3'-indole)cyanomethylene]-3-indolinone

3''-acetylSaikosaponin A and its isomer

glycyrrhizic acid and its isomer

3''-acetylSaikosaponin A and its isomer

Phillygenin

Malonylsaikosaponin D and its isomer

Hydroxy Gancaonin M and its isomer

Uralenin

Gancaonin M and its isomer

Isaindigodione

28-O-b-D-glucopyranosyl-(1-6)-beta-D-glucopyranosyl hederagin ester

3-O-a-L-Rhamnosyl-1-2-arabinosyl- oleanicaside

3-O-a-L-Rhamnosyl-1-2-arabinosyl- ursolicaside

Licoflavonol

Isolicoflavonol

4',6'-dihydroxyquercetin

Quercetin

Rhein and its isomer

Gancaoanin N and its isomer

Uralenol

6-hydroxyquercetin

5-hydroxy-7-acetoxyflavone

Hydroxyindirubin

2,5-dihydroxy-indole

Glycyrrhetic acid and its isomer

Glycyrrhetic acid and its isomer

Hederagenin

Ursolic Acid/Oleanic acid

Oleanonic acid

5-O-methyl-glycyrol

Supplemental Table 2. Involved pathways and related genes in SJC treated ARTI lung tissues.

Pathway	Number Of Genes	Genes
Cytokine-cytokine receptor interaction	10	Il21r
		Ccl3
		Cxcl10
		Cxcr5
		Pdgfra
		Tnfrsf17
		Tnfrsf13c
		Tnf
		Tnfrsf13b
		Il1r2
Primary immunodeficiency	4	Tnfrsf13c
		Tnfrsf13b
		Btk
		Cd19
Hematopoietic cell lineage	4	Ms4a1
		Tnf
		Il1r2
		Cd19
Toll-like receptor signaling pathway	4	Ccl3
		Cxcl10
		Tnf
		Pik3cg

		Tnfrsf17
		Tnfrsf13c
Intestinal immune network for IgA production	3	Tnfrsf13b
		Tnf
		Pik3cg
Amoebiasis	4	Il1r2
		Serpinb10
		Map4k1
		Pdgfra
		Tnf
MAPK signaling pathway	5	Il1r2
		Ptpn7
		Btk
		Pik3cg
B cell receptor signaling pathway	3	Cd19
		Ccl3
		Cxcl10
Chemokine signaling pathway	4	Cxcr5
		Pik3cg
Fc epsilon RI signaling pathway	3	Tnf

		Btk
		Pik3cg
		Ccl3
Chagas disease (American trypanosomiasis)	3	Tnf Pik3cg
		Tnf
Osteoclast differentiation	3	Btk Pik3cg
		Tnf
Type II diabetes mellitus	2	Pik3cg
		Cxcl10
Influenza A	3	Tnf Pik3cg
		Pik3cg
Glioma	2	Pdgfra
		Tnf
RIG-I-like receptor signaling pathway	2	Cxcl10
		Pik3cg
Melanoma	2	Pdgfra

PPAR signaling pathway	2	Fabp7 Cyp4a12a
Rheumatoid arthritis	2	Tnf Ccl3
Apoptosis	2	Tnf Pik3cg
Progesterone-mediated oocyte maturation	2	Bub1 Pik3cg
Prostate cancer	2	Pik3cg Pdgfra
T cell receptor signaling pathway	2	Tnf Pik3cg
Natural killer cell mediated cytotoxicity	2	Tnf Pik3cg
Cell cycle	2	Bub1b Bub1

		Tnf
Toxoplasmosis	2	Pik3cg
		Tnf
Hepatitis C	2	Pik3cg
		Pik3cg
Jak-STAT signaling pathway	2	Il21r
		Pik3cg
Focal adhesion	2	Pdgfra
		Pik3cg
Regulation of actin cytoskeleton	2	Pdgfra
		Pik3cg
Pathways in cancer	2	Pdgfra
		Olf984
Olfactory transduction	2	Olf1097
		Tnf
Dilated cardiomyopathy	1	
		Tnf
Asthma	1	

Measles	1	Pik3cg
Inositol phosphate metabolism	1	Pik3cg
Hypertrophic cardiomyopathy (HCM)	1	Tnf
Colorectal cancer	1	Pik3cg
Chronic myeloid leukemia	1	Pik3cg
Acute myeloid leukemia	1	Pik3cg
Arachidonic acid metabolism	1	Cyp4a12a
Phosphatidylinositol signaling system	1	Pik3cg
Small cell lung cancer	1	Pik3cg
Type I diabetes mellitus	1	Tnf
Pancreatic cancer	1	Pik3cg
Non-small cell lung cancer	1	Pik3cg
Renal cell carcinoma	1	Pik3cg

Endometrial cancer	1	Pik3cg
Oocyte meiosis	1	Bub1
Metabolic pathways	1	Cyp4a12a
Retinol metabolism	1	Cyp4a12a
mTOR signaling pathway	1	Pik3cg
Gap junction	1	Pdgfra
Pertussis	1	Tnf
Carbohydrate digestion and absorption	1	Pik3cg
Leukocyte transendothelial migration	1	Pik3cg
Cholinergic synapse	1	Pik3cg
Malaria	1	Tnf
African trypanosomiasis	1	Tnf

Endocytosis	1	Pdgfra
Graft-versus-host disease	1	Tnf
Insulin signaling pathway	1	Pik3cg
Leishmaniasis	1	Tnf
Neurotrophin signaling pathway	1	Pik3cg
Bacterial invasion of epithelial cells	1	Pik3cg
Lysosome	1	Ctse
Allograft rejection	1	Tnf
NOD-like receptor signaling pathway	1	Tnf
Cytosolic DNA-sensing pathway	1	Cxcl10
Fc gamma R-mediated phagocytosis	1	Pik3cg
TGF-beta signaling pathway	1	Tnf

ErbB signaling pathway	1	Pik3cg
Aldosterone-regulated sodium reabsorption	1	Pik3cg
Vascular smooth muscle contraction	1	Cyp4a12a
Tuberculosis	1	Tnf
Adipocytokine signaling pathway	1	Tnf
Nitrogen metabolism	1	Car12
Systemic lupus erythematosus	1	Tnf
Alzheimer's disease	1	Tnf
Amyotrophic lateral sclerosis (ALS)	1	Tnf
Fatty acid metabolism	1	Cyp4a12a
Antigen processing and presentation	1	Tnf
Calcium signaling pathway	1	Pdgfra

VEGF signaling pathway

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Pik3cg
