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SPECIALTY SECTION

This article was submitted to
Inflammation Pharmacology,
a section of the journal
Frontiers in Pharmacology

RECEIVED 27 November 2022

ACCEPTED 29 November 2022

PUBLISHED 18 January 2023

CITATION

Fan M, Xiao H, Song D, Zhu L, Zhang J,
Zhang X, Wang J, Dai H and Wang C
(2023), Addendum: A novel
N-Arylpyridone compound alleviates
the inflammatory and fibrotic reaction
of silicosis by inhibiting the ASK1-p38
pathway and regulating macrophage
polarization.
Front. Pharmacol. 13:1108989.
doi: 10.3389/fphar.2022.1108989

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Addendum: A novel N-Arylpyridone compound alleviates the inflammatory and fibrotic reaction of silicosis by inhibiting the ASK1-p38 pathway and regulating macrophage polarization

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KEYWORDS

AKEX0011, macrophage polarization, pirfenidone, pulmonary fibrosis, silicosis

An Addendum on

A Novel N-Arylpyridone compound alleviates the inflammatory and fibrotic reaction of silicosis by inhibiting the ASK1-p38 pathway and regulating macrophage polarization

by Fan M, Xiao H, Song D, Zhu L, Zhang J, Zhang X, Wang J, Dai H and Wang C (2022). *Front. Pharmacol.* 13:848435. doi: 10.3389/fphar.2022.848435

Missing information

Add information about chemical formula, [Table 2](#), polarization and antibody list.

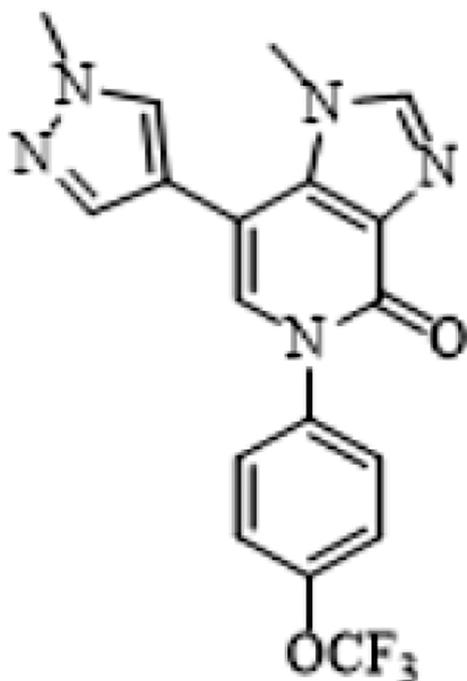
TABLE 2 (Antibody list) Primary antibodies for Western Blot.

Antibodies	Cat No.	Manufacturer	Sources of species
Fibronectin	ab2413	abcam	Rabbit
Collagen-1	66761-1-Ig	proteintech	Mouse
IκBa	#4814	cell signaling technology	Mouse
p38	#8690	cell signaling technology	Rabbit
P-p38	#4511	cell signaling technology	Rabbit
Arginase-1	ab233548	abcam	Rabbit
ASK-1	67072-1-Ig	proteintech	Rabbit
P-ASK-1	28846-1-AP	proteintech	Rabbit
NF-κB	ab32536	abcam	Rabbit
P-NF-κB	ab76302	abcam	Rabbit
iNOS	18985-1-AP	proteintech	Rabbit
β-Actin	ab8226	abcam	Mouse

Chemical formula

Chemical structure of AKEX0011

Molecular formula C₁₈H₁₄N₅O₂F₃, mass 389.3 g/mol, CAS: 1590403-33-0.



Polarization

RAW 264.7 cells are a macrophage-like, Abelson leukemia virus-transformed cell line derived from BALB/c mice. This macrophage cell line is commonly used to study phagocytosis, apoptosis, inflammation, as well as M1/M2 polarization. Polarization of M1/M2 phenotype can be determined by the expression of specific M1 (CD80, CD86) and M2 (CD206, CD163) markers detected by flow cytometry. In the *in vitro* experiments of our study, we detected the expression of CD86 and CD163 in RAW264.7 cells of each group by flow cytometry to explore macrophage polarization. Our flow cytometry results confirmed that silica induced polarization of RAW264.7 from M0 macrophages toward certain M1 subtype (F4/80 + CD86⁺), but have no effect on the polarization towards M2 subtype (F4/80 + CD163⁺).

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