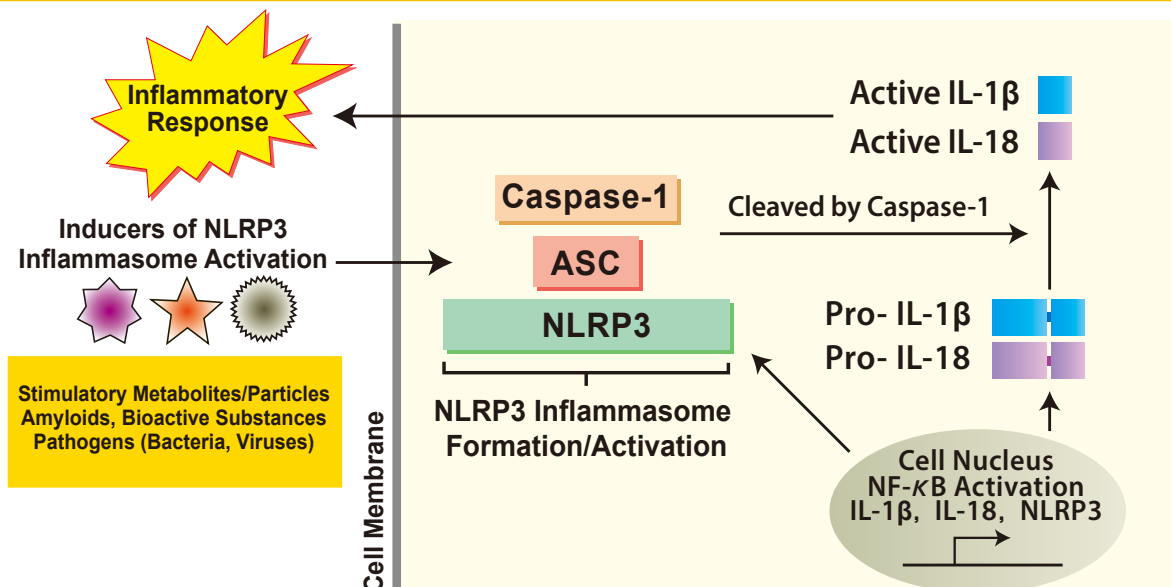


NLRP3 Inflammasome Inhibitors



Schematic illustration of the production mechanism of IL-1 β /IL-18 by NLRP3 inflammasome
(Cited and modified from the reference 3)

It has been reported that NLR family pyrin domain-containing protein 3 (NLRP3), a pattern recognition receptor, forms a complex called NLRP3 inflammasome in response to irritating metabolites and pathogens, and induces the production of pro-inflammatory cytokines, Interleukin (IL)-1 β and IL-18. In recent years, it has become clear that excessive activation of the NLRP3 inflammasome is closely related to the development of various inflammatory diseases. Therefore, inhibitors that suppress the activity of the NLRP3 inflammasome have been attracting attention.

Small Molecule NLRP3 Inflammasome Inhibitors

Arglabin	5mg [A3449]
Dapansutril	100mg / 1g [D5955]
Dexmedetomidine Hydrochloride	20mg / 100mg [D5062]
MNS	100mg / 500mg [M3390]
MCC950 Sodium Salt	10mg [M3396]
Resveratrol	1g / 5g / 25g [R0071]
VX-765	10mg [V0176]

CB₂ Receptor Selective Agonist (The Inhibitory Effect Reported)

GW-405833	10mg [G0600]
------------------	--------------

Antimicrobial Agent (The Inhibitory Effect Reported)

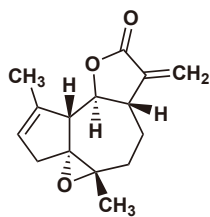
Minocycline Hydrochloride	1g / 5g [M2288]
----------------------------------	-----------------

Crude Medicine Ingredients (The Inhibitory Effect Reported)

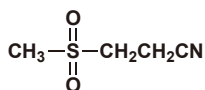
Cycloastragenol	25mg / 100mg [C3469]
Fraxinellone	10mg / 50mg [F1187]
Glycyrrhizin	1g / 25g [G0150]
Isoliquiritigenin	100mg / 1g [I0822]
Oridonin	50mg [O0387]

For Laboratory Use, Research Purposes Only.

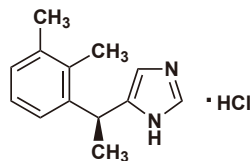
The Chemical Structures of the Each Product



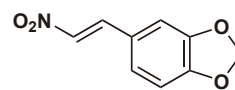
Arglablin
[A3449]



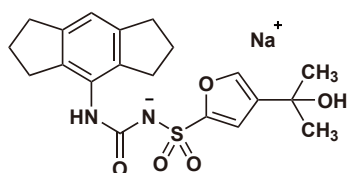
Dapansutrile
[D5955]



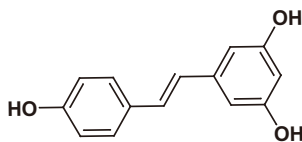
Dexmedetomidine Hydrochloride
[D5062]



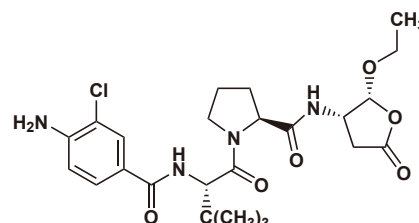
MNS
[M3390]



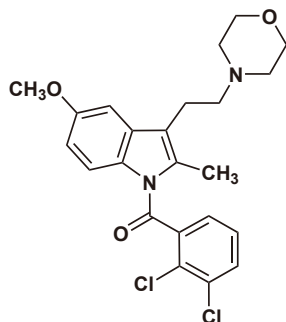
MCC950 Sodium Salt
[M3396]



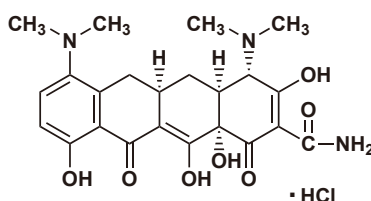
Resveratrol
[R0071]



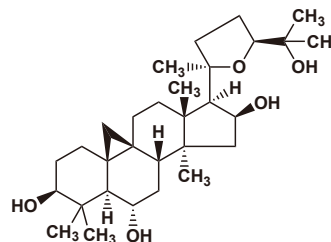
VX-765
[V0176]



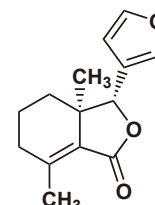
GW-405833
[G0600]



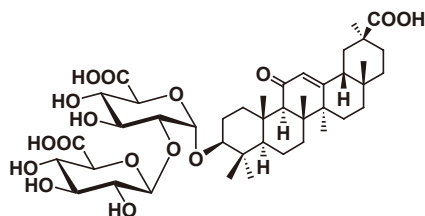
Minocycline Hydrochloride
[M2288]



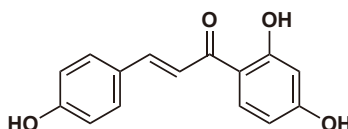
Cycloastragenol
[C3469]



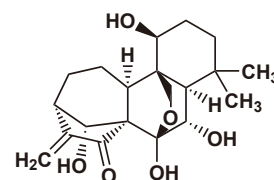
Fraxinellone
[F1187]



Glycyrrhizin
[G0150]



Isoliquiritigenin
[I0822]



Oridonin
[O0387]

- References**
- 1) NLRP3 inflammasome and its inhibitors: a review
B. Shao, Z. Xu, B. Han, D. Su, C. Liu, *Front. Pharmacol.* **2015**, 6, 262. DOI: <https://doi.org/10.3389/fphar.2015.00262>
 - 2) The NLRP3 Inflammasome: An Overview of Mechanisms of Activation and Regulation
N. Kelley, D. Jeltema, Y. Duan, Y. He, *Int. J. Mol. Sci.* **2019**, 20, 3328. DOI: <https://doi.org/10.3390/ijms20133328>
 - 3) NLRP3 inflammasome and gout arthritis (in Japanese)
T. Misawa, T. Saito, S. Akira, *Gout Nucleic Acid Metab.* **2015**, 39, 1. DOI: <https://doi.org/10.6032/gnam.39.1>

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