

Key Inflammasome Research Tools

THE STANDARDS

Unique NLRP3 Antibody

anti-NLRP3/NALP3, mAb (Cryo-2)
ICC, IHC, IP, WB AG-20B-0014-C100

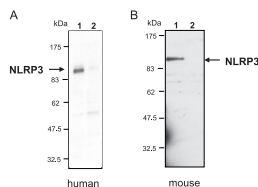


FIGURE: Human and mouse NLRP3/NALP3 are detected in THP1 cells or mouse macrophages, respectively, using anti-NLRP3/NALP3, mAb (Cryo-2) (Prod. No. AG-20B-0014) but not in THP1 expressing shRNA-hNLRP3 (A, lane 2) or NLRP3/NALP3 KO mce (B, lane 2).

LITERATURE REFERENCES FOR CASPER-1, CASPER-2 AND CRYO-2:

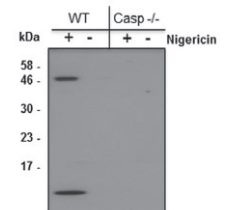
The adaptor ASC has extracellular and 'prionoid' activities that propagate inflammation: B.S. Franklin, et al.; Nat. Immunol. 15, 727 (2014) • The NLRP3 inflammasome is released as a particulate danger signal that amplifies the inflammatory response: A. Baroja-Mazo, et al.; Nat. Immunol. 15, 738 (2014)

Detect Activated p10 & p20 Caspase-1 by WB

anti-Caspase-1 (p10) (mouse), mAb (Casper-2) AG-20B-0044
anti-Caspase-1 (p20) (mouse), mAb (Casper-1) AG-20B-0042
anti-Caspase-1 (p20) (human), mAb (Bally-1) AG-20B-0048

FIGURE: Mouse caspase-1 (p10) is detected by immunoblotting using anti-Caspase-1 (p10) (mouse), mAb (Casper-2) (Prod. No AG-20B-0044).

METHOD: Caspase-1 was analyzed by Western blot in supernatants of differentiated bone marrow-derived dendritic cells (BMDCs) from wild-type and caspase-1^{-/-} mice activated or not by 5 μ M nigericin (Prod. No. AG-CN2-0020) for 30 min. Supernatants (30 μ l) were separated by SDS-PAGE under reducing conditions, transferred to nitrocellulose and incubated with anti-Caspase-1 (p10) (mouse), mAb (Casper-2) (1 μ g/ml). Proteins were visualized by a chemiluminescence detection system.



Key Antibodies

anti-Asc [Pycard], pAb (AL177) | ICC, IHC, IP, WB, FUNC AG-25B-0006
anti-AIM2 (human), mAb (3B10) | ICC, WB AG-20B-0040
anti-Caspase-4/11 (p20), mAb (Flamy-1) | IP, WB AG-20B-0060
anti-Caspase-11 (p20) (mouse), mAb (Flamy-2) | ELISA, WB AG-20B-0061
anti-RIG-I, mAb (Alme-1) | IHC, IP, WB AG-20B-0009

THE SOURCE

Small Molecule NLRP3 Inflammasome Activators & Inhibitors

Activators

Monosodium urate (Activity tested)
- Crystals AG-CR1-3950
- Ready-to-Use AG-CR1-3951
Nigericin . Na AG-CN2-0020
7BIO MR-C0020

Inhibitors

Arglabin AG-CN2-0458
BAY 11-7082 AG-CR1-0013
Colchicine AG-CN2-0048
Glyburide (USP) AG-CR1-3613
(R)-3-Hydroxybutyric acid AG-CR1-3616
(S)-3-Hydroxybutyric acid AG-CR1-3617

Isoliquiritigenin AG-CN2-0459
NEW MCC950 . Na AG-CR1-3615
Parthenolide AG-CN2-0455
Resveratrol AG-CN2-0033
Vinpocetine AG-CN2-0454