

Supplementary Information

**Lower temperature exacerbates NLRP3 inflammasome activation by promoting monosodium urate crystallization, causing gout**

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Running title: Temperature change regulates gout attack via NLRP3 inflammasome activation

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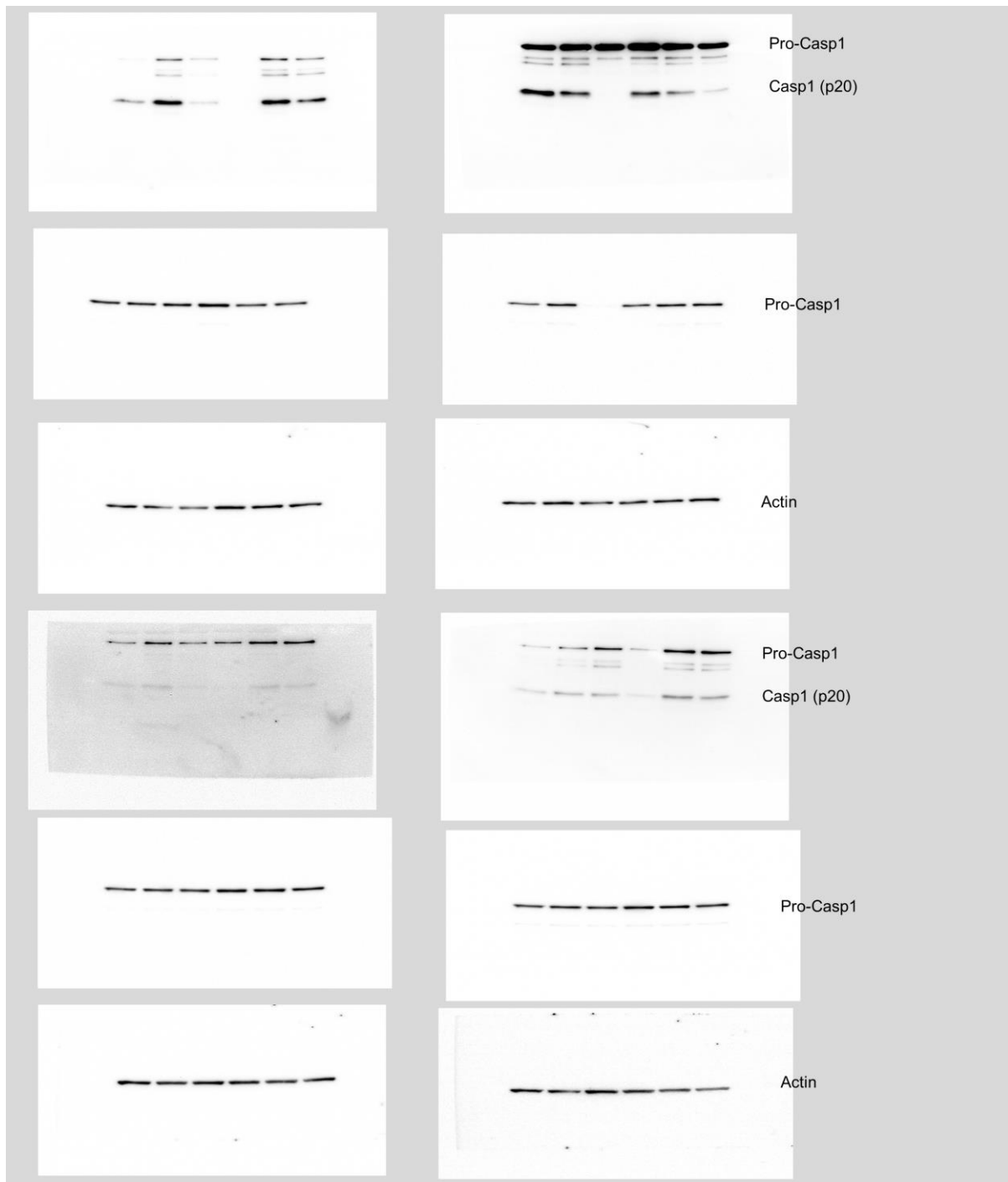
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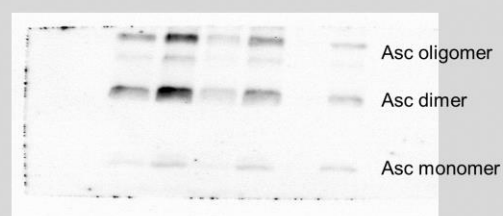
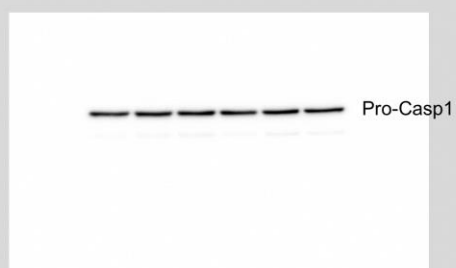
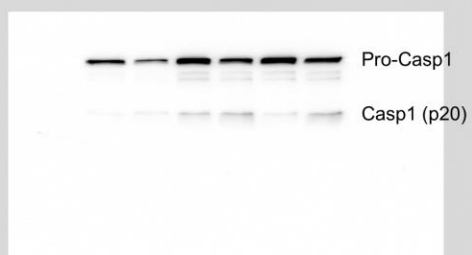
**Supplemental Table S1. The details of materials**

Items	Cat. No.	Source
12-well-plate	30012	SPL Life Science, Gyeonggi-do, Republic of Korea
96-well-black plate	30296	SPL Life Science, Gyeonggi-do, Republic of Korea
aluminum potassium sulfate (Alum)	039-4404	Daejung Chemicals & Materials Co. Gyeonggi-do, Republic of Korea
anti-actin antibody	sc-1615	Santa Cruz Biotechnology, Dallas, TX, USA
anti-Asc antibody	sc-22514	Santa Cruz Biotechnology, Dallas, TX, USA
anti-Casp1 (p20) antibody	AG-20B-0042-C100	AdipoGen Co., San Diego, CA, USA
anti-mouse IL-1 $\beta$ antibody	AF-401-NA	R&D Systems, Minneapolis, MN, USA
anti-NLRP3 antibody	AG-20B-0014-C100	AdipoGen Co., San Diego, CA, USA
CA-074 Me	BML-PI126-0001	Enzo Life Science, Inc., New York, NY, USA
chemiluminescence solution (WESTSAVER STAR)	LF-QC0106	AbFrontier, Seoul, Republic of Korea
chemiluminescent system (EZ-Capture II)		ATTO Technology, Tokyo, Japan
CO <sub>2</sub> analyzer (G100)		Geotechnical Instruments, Warwickshire, UK
CS Analyzer (Ver. 3)		ATTO Technology, Tokyo, Japan
cytochalasin D	1233	Tocris Bioscience, Bristol, UK
diphenyleneiodonium (DPI)	0504	Tocris Bioscience, Bristol, UK
fetal bovine serum (FBS)	VWR-97068-085	Avantor, Gyeongsanbuk-do, Republic of Korea
flagellin	tlrl-stfla	Invivogen, San Diego, CA, USA
fluorescent beads	L5155 / L4655	Sigma-Aldrich Co., MO, USA
GraphPad Prism 6		GraphPad Software, San Diego, CA, USA
jetPRIME <sup>TM</sup>	114-01	Polyplus-transfection Inc., Illkirch, France
Lipofectamine 2000	11668027	Invitrogen, Carlsbad, CA, USA
lipopolysaccharide (LPS)	L4130	Sigma-Aldrich Co., MO, USA
mice (C57BL/6)		Nara Biotech, Seoul, Republic of Korea
microplate spectrophotometer (Synergy <sup>TM</sup> H1)		BioTek, Winooski, VT, USA
mini-PROTEAN Tetra cell system		Bio-Rad, Hercules, CA, USA
Monosodium urate (MSU) crystals	U2875	Sigma-Aldrich Co., MO, USA
mouse IL-1 $\beta$ ELISA kit	DY401	R&D Systems, Minneapolis, MN, USA
nigericin (NG)	4312	Tocris Bioscience, Bristol, UK
potassium solution (KCl)	P2014	Biosesang, Seoul, Republic of Korea
proteinase inhibitor cocktail (Halt <sup>TM</sup> )	78442	ThermoFisher Scientific, Middlesex, MA, USA
PVDF membrane	88518	GE Healthcare Bio-Science, Pittsburgh, PA, USA
RPMI 1640	LM 011-01	Welgene, Gyeongsanbuk-do, Republic of Korea
suberic acid bis	S1885	Sigma-Aldrich Co., MO, USA
Z-VAD-FMK	FMK001	R&D System, Minneapolis, MN, USA

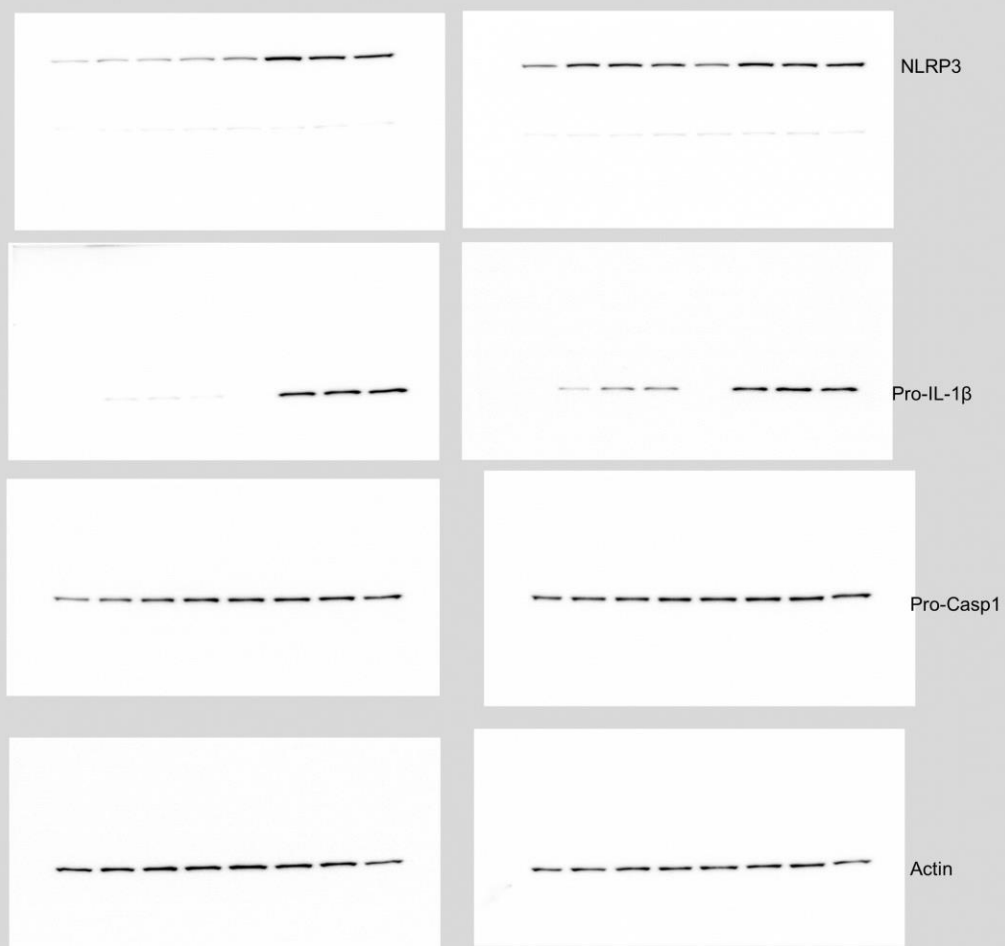
## Original Images for Blots of Fig. 1B



## Original Images for Blots of Fig. 2B



## Original Images for Blots of Fig. 3A



**(Continued.) Original Images for Blots of Fig. 3A**

