



Pyroptosis Research

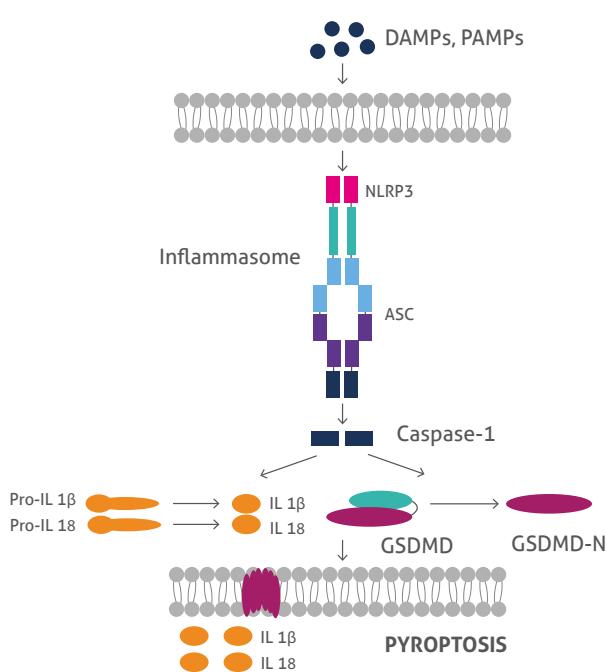
Pyroptosis, an inflammatory form of regulated cell death has gained a lot attention in the recent years due to its association with multiple diseases and as an effective approach for treating cancers.

Pyroptosis typically proceeds through either the canonical pathway or the non-canonical pathway. In the canonical pathway, recognition of pathogenic stimuli by intracellular pattern recognition receptors results in inflammasome assembly and the consequent activation of caspase-1 leading to gasdermin D (GSDMD)

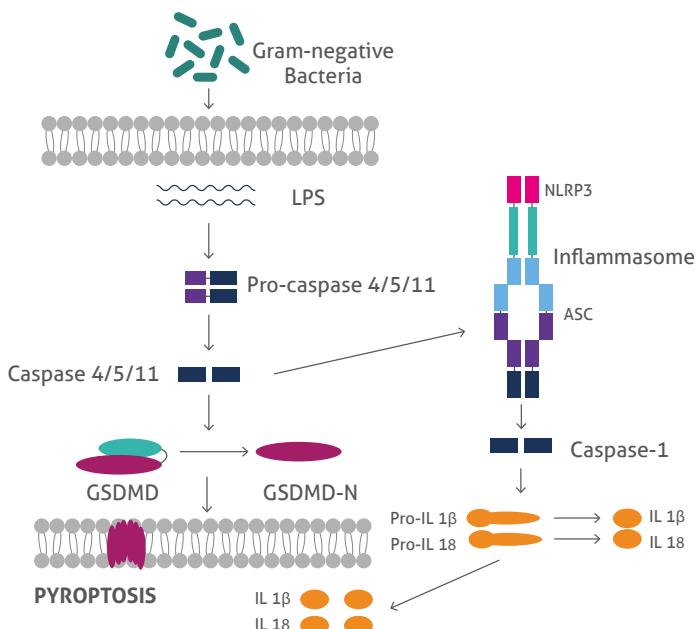
cleavage and the release of the inflammatory cytokines, IL-1 β and IL-18.

The non-canonical pyroptotic pathway is induced by LPS derived from gram-negative bacteria, which in turn activates caspase-11 in mice or caspase4/5 in humans leading to GSDMD cleavage and subsequent pyroptotic cell death. Activated caspase-11 also causes secondary activation of the NLRP3 inflammasome resulting in IL-1 β and IL-18 release.

Canonical Pyroptosis



Non-Canonical Pyroptosis



Gasdermin D

Gasdermin D (GSDMD) functions as a key effector of the pyroptotic pathway by inducing the formation of transmembrane pores followed by the release of inflammatory cytokines upon its cleavage by inflammatory caspases.

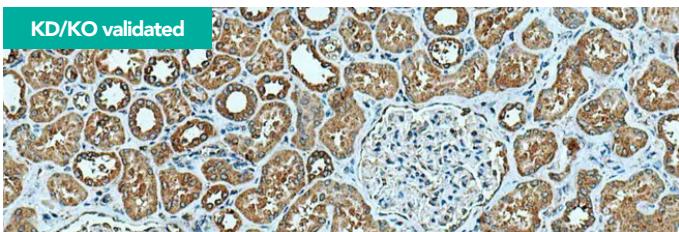
Proteintech's recombinant GSDMD Antibody (Cat. No. 80918-1-RR) provides high lot-to-lot consistency and specificity. Various lysates were subjected to SDS PAGE followed by western blot with 80918-1-RR (GSDMD antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.

Unconjugated Primary Antibodies for Pyroptosis Research

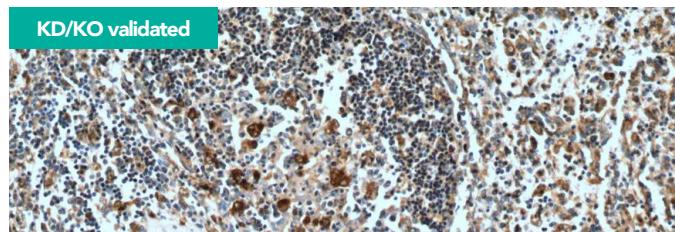
Catalog No.	Antigen	Clonality	Applications
20590-1-AP	AIM2	Polyclonal	WB, IHC, ELISA
66902-1-Ig	AIM2	Monoclonal	WB, CoIP, ELISA
10500-1-AP	ASC/TMS1	Polyclonal	WB, IP, IHC, IF, CoIP, ELISA
67494-1-Ig	ASC/TMS1	Monoclonal	WB, IHC, ELISA
22915-1-AP	Caspase 1/p20/p10	Polyclonal	WB, IHC, IF, ELISA
19677-1-AP	Caspase 3/p17/p19	Polyclonal	WB, RIP, IP, IHC, IF, FC, ELISA
66470-2-Ig	Caspase 3/p17/p19	Monoclonal	WB, IHC, IF, ICC, ELISA
67398-1-Ig	Caspase 4	Monoclonal	WB, IHC, ELISA
11856-1-AP	Caspase 4/p20/p10	Polyclonal	WB, IHC, IF, ELISA
13423-1-AP	Caspase 8/p43/p18	Polyclonal	WB, RIP, IP, IHC, IF, ELISA
66093-1-Ig	Caspase 8/p43/p18	Monoclonal	WB, IP, IHC, IF, ELISA
13075-1-AP	DFNA5/GSDME	Polyclonal	WB, IHC, IF, FC, ELISA
67731-1-Ig	DFNA5/GSDME	Monoclonal	WB, FC, ELISA
11288-1-AP	Granzyme A	Polyclonal	WB, IHC, ELISA
13588-1-AP	Granzyme B	Polyclonal	WB, IHC, IF, FC, ELISA
12885-1-AP	GSDMB	Polyclonal	WB, IHC, ELISA
67527-1-Ig	GSDMB	Monoclonal	WB, ELISA
27630-1-AP	GSDMC	Polyclonal	WB, IHC, ELISA
20770-1-AP	GSDMD	Polyclonal	WB, IHC, IF, FC, ELISA
66387-1-Ig	GSDMD	Monoclonal	WB, IF, ELISA
80918-1-RR	GSDMD	Recombinant	WB, ELISA
67790-1-Ig	IFI16	Monoclonal	WB, IHC, ELISA
10268-1-AP	IkB Alpha	Polyclonal	WB, IP, IHC, IF, FC, ELISA
18220-1-AP	IkB Alpha	Polyclonal	WB, IP, IHC, IF, ELISA
51066-1-AP	IkB Alpha	Polyclonal	WB, IP, IHC, ELISA
66418-1-Ig	IkB Alpha	Monoclonal	WB, IHC, ELISA
80019-1-RR	IkB Alpha	Recombinant	WB, IHC, ELISA
15649-1-AP	IKBKB	Polyclonal	WB, IP, IHC, IF, ELISA
16806-1-AP	IL-1 Beta	Polyclonal	WB, IHC, IF, ELISA
66737-1-Ig	IL-1 Beta	Monoclonal	WB, IP, IHC, IF, ELISA
10663-1-AP	IL-18	Polyclonal	WB, IP, IHC, IF, FC, ELISA
60070-1-Ig	IL-18	Monoclonal	WB, IHC, IF, ELISA
11312-1-AP	IRF3	Polyclonal	WB, IP, IHC, IF, FC, CoIP, ChIP, ELISA
66670-1-Ig	IRF3	Monoclonal	WB, IHC, IF, ELISA
80519-1-RR	IRF3	Recombinant	WB, IHC, IF, ELISA
25542-1-AP	MCP1	Polyclonal	WB, IHC, IF, FC, Blocking, ELISA
29547-1-AP	MCP1	Polyclonal	WB, ELISA
23230-1-AP	MYD88	Polyclonal	WB, IHC, IF, CoIP, ELISA
67969-1-Ig	MYD88	Monoclonal	WB, IHC, ELISA
69502-1-Ig	NeutraControl TNF Alpha	Monoclonal	Non-Neutralization, ELISA
69002-1-Ig	NeutraKine® TNF Alpha	Monoclonal	Neutralization, ELISA
14220-1-AP	NFKB1	Polyclonal	WB, RIP, IP, IHC, IF, ChIP, ELISA
23576-1-AP	NFKB1	Polyclonal	WB, IHC, IF, chIP, ELISA
66992-1-Ig	NFKB1	Monoclonal	WB, IHC, IF, FC, ELISA

Unconjugated Primary Antibodies for Pyroptosis Research

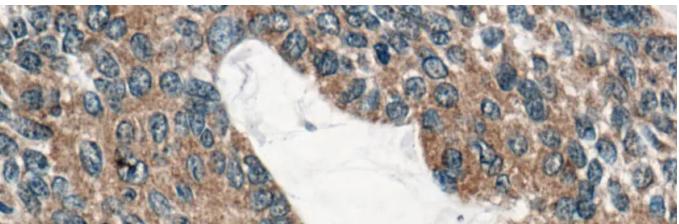
Catalog No.	Antigen	Clonality	Applications
15506-1-AP	NFKB1,p105,p50-Specific	Polyclonal	WB, IHC, ELISA
10745-1-AP	NF-κB p65	Polyclonal	WB, IP, IHC, IF, FC, CoIP, ChIP, ELISA
66535-1-Ig	NF-κB p65	Monoclonal	WB, IHC, IF, CoIP, ELISA
19771-1-AP	NLRP3	Polyclonal	WB, IHC, IF, CoIP, ELISA
28207-1-AP	P2RX7	Polyclonal	WB, IHC, ELISA
28445-1-AP	PGAM5	Polyclonal	WB, IHC, IF, ELISA
19811-1-AP	TLR4	Polyclonal	WB, Microtiter plate binding assay, IP, IHC, IF, CoIP, ELISA
66350-1-Ig	TLR4	Monoclonal	WB, IHC, IF, ELISA
17590-1-AP	TNF Alpha	Polyclonal	WB, Transwell Assay, Cell treatment, ELISA
26405-1-AP	TNF Alpha	Polyclonal	WB, IHC, ELISA
60291-1-Ig	TNF Alpha	Monoclonal	WB, IHC, IF, ELISA
21574-1-AP	TNFR1	Polyclonal	WB, IP, IHC, IF, FC, ELISA
60192-1-Ig	TNFR1	Monoclonal	WB, IHC, IF, FC, ELISA
26845-1-AP	TRAF1	Polyclonal	WB, IHC, IF, FC, ELISA
23288-1-AP	TRIF/TICAM1	Polyclonal	WB, IHC, ELISA



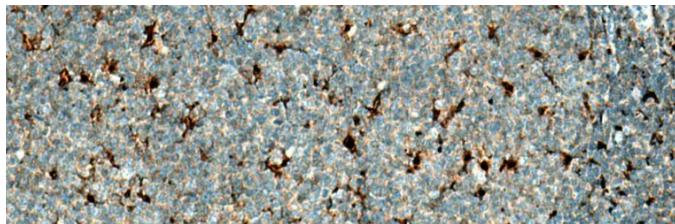
IHC analysis of human kidney tissue using polyclonal NLRP3 (19771-1-AP) antibody.



IHC analysis of human spleen tissue using polyclonal Caspase-1 (22915-1-AP) antibody.



IHC analysis of human skin cancer tissue using monoclonal IL-1 beta antibody (66737-1-Ig).



IHC analysis of human tonsillitis tissue using monoclonal IL-18 antibody (60070-1-Ig).



IL-18 Ready-to-use IHCEeasy Kit

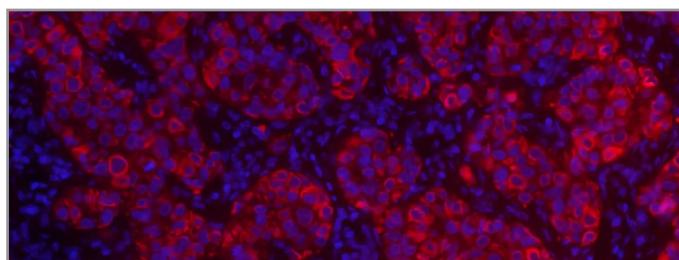
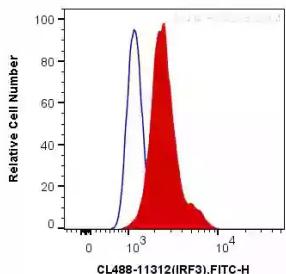
The most complete IHC workflow kits containing all the reagents and antibodies that you would need for staining your tissue samples, including the primary antibody.

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CoraLite® Fluorescent Dye-Conjugated Antibodies for Pyroptosis Research

Catalog No.	Antigen	Applications	Species Reactivity
CL488-19677	Caspase 3/p17/p19	IF	human, mouse, rat
CL488-66470	Caspase 3/p17/p19	IF	Human, mouse, rat
CL594-19677	Caspase 3/p17/p19	IF, FC (Intra)	human, mouse, rat
CL488-66093	Caspase 8/p43/p18	IF	human
CL594-66093	Caspase 8/p43/p18	IF	human
PE-65170	CD120a	FC	Human
CL594-66387	GSDMD	IF	human
CL488-10268	IκB Alpha	IF	human
CL647-10268	IκB Alpha	IF	human, mouse, pig, rat
CL488-11312	IRF3	IF, FC (Intra)	human, mouse, rat
CL555-11312	IRF3	FC (Intra)	human, mouse, rat
CL650-25542	MCP1	FC (Intra)	human
CL488-10745	NF-κB p65	IF	human, mouse, rat, pig
CL488-66535	NF-κB p65	IF	Human, rat
CL594-10745	NF-κB p65	IF	human, mouse, rat, pig
CL594-66535	NF-κB p65	IF	Human, rat
CL650-10745	NF-κB p65	FC (Intra)	human, mouse, rat
CL488-60291	TNF Alpha	WB, IF	human
CL488-69002	TNF Alpha	FC (Intra)	Human
CL594-60291	TNF Alpha	IF	human
CL647-69002	TNF Alpha	FC (Intra)	Human
CL488-60192	TNFR1	IF	human, mouse, rat, pig
CL594-60192	TNFR1	IF	human, mouse, rat, pig
CL647-26845	TRAF1	FC (Intra)	human



Flow cytometry analysis of HepG2 cells intracellularly stained with CoraLite®488 Anti-Human IRF3 (CL488-11312) (red), or Control Antibody.

Immunofluorescence analysis of human breast cancer tissue using TNF alpha antibody (CL594-60291).



Human IL-1 beta ELISA Kit

Ready-to-use and highly sensitive two-site sandwich ELISA kits.

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about our ELISA kits

