



cGAS-STING 信号通路

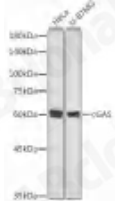
cGAS-STING SIGNALING

cGAS-STING信号通路作为重要的异常胞浆DNA监控机制之一，在宿主防御病原体、肿瘤免疫、自身免疫性疾病和衰老相关炎症中发挥独特和关键作用。cGAS-STING信号通路核心研究靶点包括胞浆DNA感受器、信号转导蛋白、转录因子和信号通路调节分子。cGAS-STING通路在肿瘤细胞中既可产生免疫效应又可使癌细胞凋亡。在正常真核细胞中，DNA和细胞质是分离的。然而在肿瘤细胞中，由于癌细胞染色体大量复制的原因，DNA泄漏在细胞质中，加大了其与DNA感受器(如cGAS)结合的概率，进而激活cGAS-STING通路，产生抗肿瘤免疫效应。除此之外，cGAS-STING通路在肿瘤细胞中还降低了抗凋亡蛋白BCL 2的表达，并上调了促凋亡蛋白BAX的表达，进而BAX介导线粒体外膜的透化作用并激活caspase 9来源的caspase 3，最终导致癌细胞的凋亡。

明星产品

A8335 cGAS Rabbit pAb

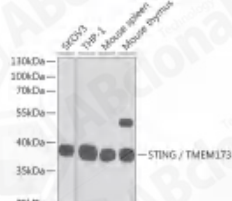
Applications:WB,IHC,IF,IP
Reactivity:Human,Mouse,Rat



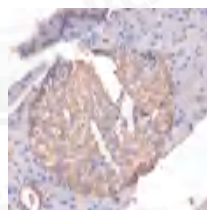
Western blot analysis of extracts of various cell lines, using cGAS antibody (A8335) at 1:1000 dilution.

A3575 STING/TMEM173 Rabbit pAb

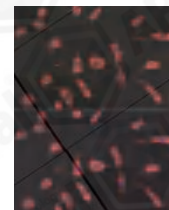
Applications:WB,IHC,IF,IP Reactivity:Human,Mouse,Rat



Western blot analysis of extracts of various cell lines, using STING / TMEM173 antibody (A3575) at 1:1000 dilution.



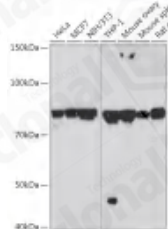
Immunohistochemistry of paraffin-embedded rat pancreas using STING / TMEM173 antibody (A3575) at dilution of 1:100 (40x lens).



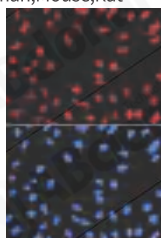
Immunofluorescence analysis of L929 cells using STING / TMEM173 antibody (A3575) at dilution of 1:100. Blue: DAPI for nuclear staining.

A2007 IFI16 Rabbit pAb

Applications:WB,IF Reactivity:Human,Mouse,Rat



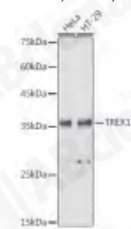
Western blot analysis of extracts of various cell lines, using IFI16 antibody (A2007) at 1:1000 dilution.



Immunofluorescence analysis of U2OS cells using IFI16 antibody (A2007). Blue: DAPI for nuclear staining.

A6778 TREX1 Rabbit pAb

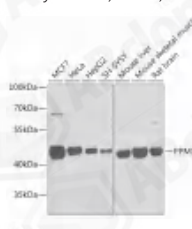
Applications:WB,IHC,IF
Reactivity:Human,Mouse,Rat



Western blot analysis of extracts of various cell lines, using TREX1 antibody (A6778) at 1:1000 dilution.

A6699 PPM1A Rabbit pAb

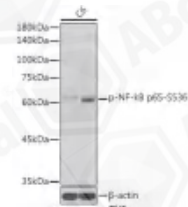
Applications:WB,IF
Reactivity:Human,Mouse,Rat



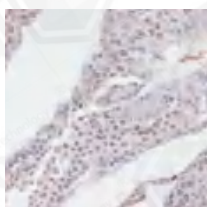
Western blot analysis of extracts of various cell lines, using PPM1A antibody (A6699) at 1:1000 dilution.

AP0475 Phospho-RelA-S536 Rabbit pAb

Applications:WB,IHC Reactivity:Human,Mouse,Rat



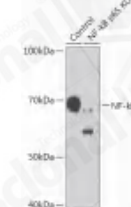
Western blot analysis of extracts of C6 cells, using Phospho-RelA-S536 antibody (AP0475) at 1:500 dilution. C6 cells were treated by TNF-α (20 ng/ml) at 37°C for 30 minutes after serum-starvation overnight.



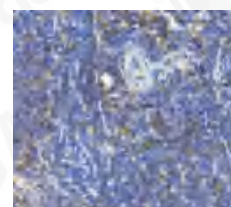
Immunohistochemistry of paraffin-embedded mouse testis using Phospho-NF-κB p65-S536 antibody (AP0475) at dilution of 1:200 (40x lens).

A19653 [KO Validated] NF-κB p65 Rabbit mAb

Applications:WB,IHC,IP Reactivity:Human,Mouse,Rat



Western blot analysis of extracts from normal (control) and NF-κB p65 knockout (KO) HeLa cells, using NF-κB p65 antibody (A19653) at 1:1000 dilution.



Immunohistochemistry of paraffin-embedded rat spleen using NF-κB p65 antibody (A19653) at dilution of 1:100 (40x lens).



cGAS-STING信号通路精选研究产品

分类	研究靶点	产品货号	产品名称	应用	反应种属
胞浆DNA感受器	cGAS	A8335	cGAS Rabbit pAb	WB,IHC,IF,IP	Human,Mouse,Rat
		AP0946	Phospho-CGAS-Y215 Rabbit pAb	WB	Human,Mouse,Rat
	DDX41	A6576	DDX41 Rabbit pAb	WB,IHC,IF,IP	Human,Mouse,Rat
	DAI/ZBP1	A13899	ZBP1 Rabbit pAb	WB	Mouse,Rat
	IFI16	A2007	IFI16 Rabbit pAb	WB,IF	Human,Mouse,Rat
		A14002	IFI16 Rabbit pAb	WB,IHC	Human,Mouse,Rat
信号转导分子	STING	A3575	STING / TMEM173 Rabbit pAb	WB,IHC,IF,IP	Human,Mouse,Rat
	NAK/TBK1	A3458	TBK1/NAK Rabbit mAb	WB,IF	Human,Mouse,Rat
		AP1026	Phospho-TBK1/NAK-S172 Rabbit mAb	WB	Human,Mouse
转录因子	IRF3	A11118	[KO Validated] IRF3 Rabbit pAb	WB,IHC,IF,ChIP	Human,Mouse,Rat
		A19717	[KO Validated] IRF3 Rabbit mAb	WB	Human,Mouse
		AP0623	Phospho-IRF3-S396 Rabbit pAb	WB	Human,Mouse,Rat
	NF-κB	A19653	[KO Validated] RelA Rabbit mAb	WB,IHC,IP	Human,Mouse,Rat
		AP0475	Phospho-RelA-S536 Rabbit pAb	WB,IHC	Human,Mouse,Rat
	STAT6	A19120	STAT6 Rabbit mAb	WB,IF	Human,Mouse
		AP0456	Phospho-STAT6-Y641 Rabbit pAb	WB	Human
信号通路调节分子	ULK1	A8529	ULK1 Rabbit pAb	WB,IHC,IF	Human,Mouse,Rat
		AP0736	Phospho-ULK1-S757 Rabbit pAb	WB	Human
		AP0760	Phospho-ULK1-S555 Rabbit pAb	WB	Human
	PPM1A	A6699	PPM1A Rabbit pAb	WB,IF	Human,Mouse,Rat
	RNF5	A8351	RNF5 Rabbit pAb	WB,IHC,IF	Human,Mouse,Rat
	TRIM21	A18027	[KO Validated] TRIM21 Rabbit pAb	WB,IHC,IF	Human,Mouse,Rat
	AMFR	A16347	AMFR Rabbit pAb	WB,IHC	Human
	INSIG1	A16278	INSIG1 Rabbit pAb	WB	Human,Rat
	DHHC7	A17981	ZDHHC7 Rabbit pAb	WB	Human,Mouse
	DHHC15	A14454	ZDHHC15 Rabbit pAb	WB	Human,Rat
	TREX1	A3819	TREX1 Rabbit mAb	WB	Human
		A6778	TREX1 Rabbit pAb	WB,IHC,IF	Human,Mouse,Rat
	NLRX1	A4976	NLRX1 Rabbit pAb	WB	Human,Mouse,Rat

参考文献
REFERENCES1. *Nature Reviews Genetics* (2019) 20: 657-674.2. *Science*. 2019 Mar 8;363(6431). pii: eaat8657. doi: 10.1126/science.aat8657.3. *Eur J Immunol*. (2014):634-40.4. *IUBMB Life*. 2016 Nov;68(11):858-870.5. *J Inflamm (Lond)*. (2017)14:11.6. *Arch Immunol Ther Exp (Warsz)*.(2018) 66:125-132.7. *Nat Immunol*. (2010) 11:1005-1113.8. *Nat Chem Biol*. (2017) 13:210-217.9. *Trends Immunol*. (2017) 38:194-205.10. *Cell*. (2017) 171:1110-1124.e18.11. *Immunity*. (2011) 34:637-650.12. *Cell*. (2011) 147:436-446.13. *J Biol Chem*. (2017) 292:5405-5417.14. *Nature*. (2019) 567:262-266.