

ARG30110 Mitochondria / Caspase dependant Apoptosis Antibody Panel (Caspase3, Caspase9, Cytochrome c, PARP) (WB)

Package: 1 kit
Store at: -20°C

Component

Cat. No.	Component Name	Host clonality	Reactivity	Application	Package
ARG20006	anti-Cytochrome C antibody	Rabbit pAb	Hu, Ms, Rat, Bov, Chk, Dog	IP, WB	25 µg
ARG20048	anti-Caspase 9 (cleaved) antibody	Rabbit pAb	Hu	IP, WB	25 µg
ARG20001	anti-Caspase 3 antibody [C33]	Mouse mAb	Hu	WB	25 µg
ARG65351	Goat anti-Rabbit IgG antibody (HRP)	Goat pAb	Rb	ELISA, IHC-P, WB	50 µl
ARG65350	Goat anti-Mouse IgG antibody (HRP)	Goat pAb	Ms	ELISA, IHC-P, WB	50 µl

Summary

Product Description	Apoptosis is the process of programmed cell death that may occur in multicellular organism. Characteristic phenomena of apoptosis includes surface membrane blebbing, cell shrinkage, nuclear and cytoplasmic condensation, and DNA fragmentation. This Mitochondria / Caspase-dependent Apoptosis kit investigates the apoptosis process via downstream pathway of Cytochrome C released from mitochondria. The Bcl-2 family proteins regulate apoptosis by controlling mitochondrial permeability. The anti-apoptotic proteins Bcl-2 and Bcl-xL reside in the outer membrane of mitochondria and inhibit cytochrome c release. The apoptotic proteins Bad, Bid, Bax, and Bim, otherwise, promote Cytochrome C release and trigger cell death. Upon release from mitochondria, cytochrome c binds to Apaf-1 and forms apoptosome with Caspase-9. Subsequently, proCaspase-3 will be cleaved and activated. Finally, PARP is inactivated by active caspase-3 cleavage and cell death occurs.
Target Name	Mitochondria / Caspase dependant Apoptosis
Alternate Names	Mitochondria/Caspase dependant Apoptosis antibody; Caspase 3 antibody; Cytochrome C antibody; PARP (cleaved) antibody; Caspase 9 (cleaved) antibody

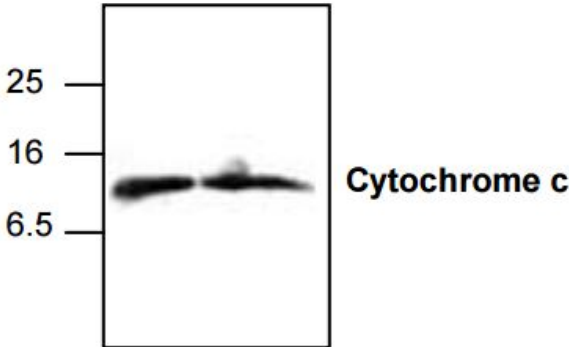
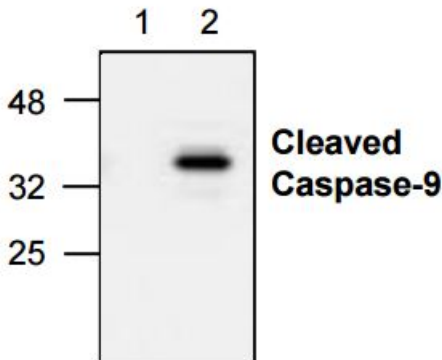
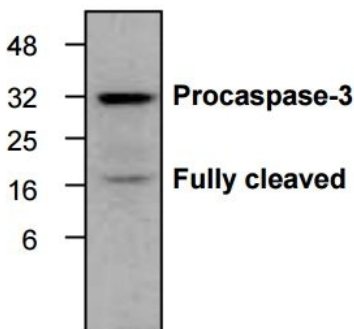
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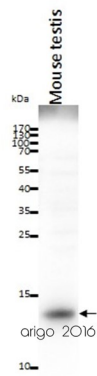
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Full Name	Antibody Panel for Mitochondria/Caspase dependant Apoptosis (Caspase3, Caspase9, Cytochrome c, PARP)
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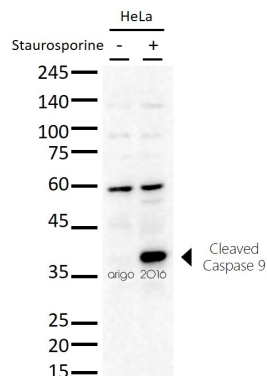
Images

	<p>ARG20006 anti-Cytochrome c antibody WB image</p> <p>Western Blot: 1. Jurkat cell lysate 2. 3T3 cell lysate stained with anti-Cytochrome c antibody (ARG20006).</p> <p>The cytochrome c antibody detects the 12.6 kDa cytochrome c from human, mouse, and rat samples. Jurkat cell lysate, NIH3T3 cell lysate, and rat kidney tissue lysate can be used as positive controls.</p>
	<p>ARG20048 anti-Caspase-9 (Active) antibody WB image</p> <p>Western Blot: 1. Untreated Jurkat cell lysate 2. Etoposide treated Jurkat cell lysate stained with anti-Caspase 9 active antibody (ARG20048).</p> <p>The anti-active caspase-9 antibody recognizes only the cleaved caspase-9 (37 kDa). It does not recognize full-length caspase-9 or any other caspases.</p>
	<p>ARG20001 Caspase 3 antibody [C33] WB validated image</p> <p>Western blot: HeLa cells treated with camptothecin (2 μM) stained with anti-Caspase 3 antibody [C33] (ARG20001).</p> <p>The antibody recognizes both proform and the cleaved large fragment of caspase-3 in samples of human, mouse and rat origins. However, the optimal conditions should be determined individually.</p>



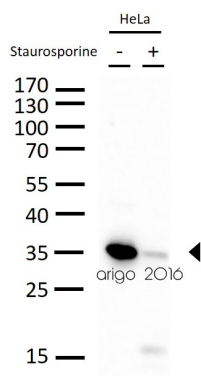
ARG20006 anti-Cytochrome C antibody WB image

Western blot: 20 µg of Mouse testis lysate stained with ARG20006 anti-Cytochrome C antibody at 2 µg/ml dilution.



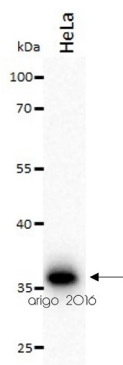
ARG20048 anti-Caspase 9 (cleaved) antibody WB image

Western blot: 20 µg of HeLa untreated or treated with Staurosporine and stained with ARG20048 anti-Caspase 9 (cleaved) antibody at 1:500 dilution.



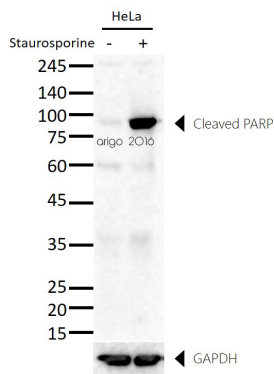
ARG20001 anti-Caspase 3 antibody [C33] WB image

Western blot: 30 µg of HeLa cells untreated or treated with Staurosporine (1µM, overnight). The blots were stained with ARG20001 anti-Caspase 3 antibody [C33] at 1:500 dilution.



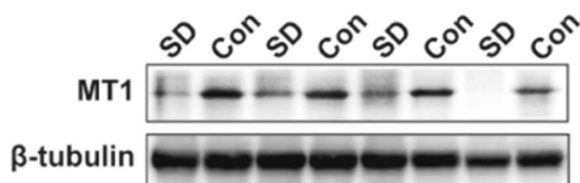
ARG20001 anti-Caspase 3 antibody [C33] WB image

Western blot: 20 µg of HeLa cell lysates stained with ARG20001 anti-Caspase 3 antibody [C33] at 2 µg/ml dilution.



ARG20041 anti-PARP (cleaved) antibody WB image

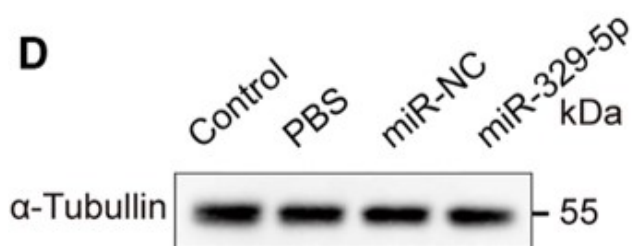
Western blot: 30 µg of HeLa untreated or treated with Staurosporine and stained with ARG20041 anti-PARP (cleaved) antibody at 1:500 dilution.



ARG65351 Goat anti-Rabbit IgG antibody (HRP) WB image

Western blot: Rat placental stained with [ARG57589 anti-MTNR1A antibody](#) at 1:1000 dilution, ARG65351 Goat anti-Rabbit IgG antibody (HRP) at 1:5000 dilution.

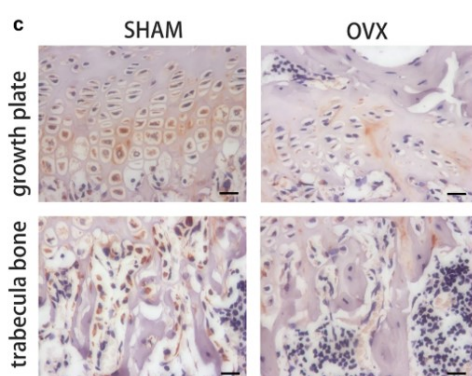
From Jinzhi Li et al. J Reprod Immunol. (2023), [doi: 10.1016/j.jri.2023.104166](#), Fig. 2.B.



ARG65351 Goat anti-Rabbit IgG antibody (HRP) WB image

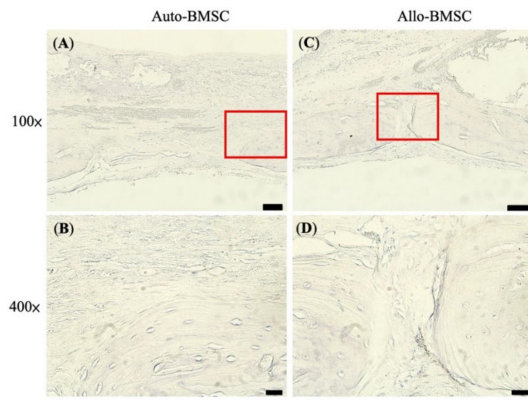
Western blot: Mouse retina stained with [ARG65693 anti-alpha Tubulin antibody](#) and ARG65351 Goat anti-Rabbit IgG antibody (HRP)

From Xiaoyuan Ye et al. Mol Ther Nucleic Acids. (2024), [doi: 10.1016/j.omtn.2024.102209](#), Fig. 5.D.



ARG65351 Goat anti-Rabbit IgG antibody (HRP) IHC-P image

From Yu-Qian Song et al. J Mol Med (Berl) (2022), [doi: 10.1007/s00109-021-02165-0](#), Fig. 5.c.



ARG65350 Goat anti-Mouse IgG antibody (HRP) IHC-P image

From Cheng-Feng Chu et al. J Pers Med. (2021), [doi: 10.3390/jpm11121326](https://doi.org/10.3390/jpm11121326), Fig. 6.