ARG66888
anti-Caspase 3 (cleaved) antibody

Package: 100 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody recognizes Caspase 3 (cleaved)
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, IHC-Fr, IHC-P, WB
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Target Name	Caspase 3 (cleaved)
Species	Human
Immunogen	Recombinant protein of cleaved Caspase 3.
Conjugation	Un-conjugated
Alternate Names	CASP3; Caspase 3; Apopain; CPP32; CPP32B; Caspase 3, Apoptosis-Related Cysteine Peptidase; Caspase 3, Apoptosis-Related Cysteine Protease; SREBP Cleavage Activity 1; Cysteine Protease CPP32; Protein Yama; EC 3.4.22.56; Caspase-3; CASP-3; CPP-32; SCA-1; Yama; PARP Cleavage Protease; Procaspase3; EC 3.4.22

Application Instructions

Application table

Application	Dilution
ICC/IF	1:50 - 1:200
IHC-Fr	Assay-dependant
IHC-P	1:100 - 1:200
WB	1:250 - 1:1000

Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Positive Control	HeLa, NIH/3T3 and Rat brain
Observed Size	~ 20 kDa (cleaved form)

Properties

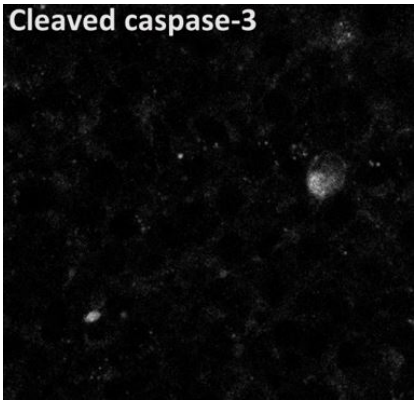
Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS (pH 7.4), 0.02% Sodium azide, 50% Glycerol and 0.5% BSA.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol and 0.5% BSA

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. 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 Symbol	CASP3
Gene Full Name	caspase 3, apoptosis-related cysteine peptidase
Background	The protein encoded by this gene is a cysteine-aspartic acid protease that plays a central role in the execution-phase of cell apoptosis. The encoded protein cleaves and inactivates poly(ADP-ribose) polymerase while it cleaves and activates sterol regulatory element binding proteins as well as caspases 6, 7, and 9. This protein itself is processed by caspases 8, 9, and 10. It is the predominant caspase involved in the cleavage of amyloid-beta 4A precursor protein, which is associated with neuronal death in Alzheimer's disease. [provided by RefSeq, Aug 2017]
Function	Cleaves XRCC4 and phospholipid scramblase proteins XKR4, XKR8 and XKR9, leading to promote phosphatidylserine exposure on apoptotic cell surface. [UniProt]
Highlight	Related Antibody Duos and Panels: ARG30105 Apoptosis Marker Antibody Duo (Caspase3, PARP) ARG30110 Mitochondria/Caspase dependant Apoptosis Antibody Panel (Caspase3, Caspase9, Cytochrome c, PARP) (WB) Related products: Caspase 3 antibodies; Caspase 3 Duos / Panels; Anti-Mouse IgG secondary antibodies;
Research Area	Cancer antibody; Cell Biology and Cellular Response antibody; Cell Death antibody; Neuroscience antibody; Apoptosis Marker antibody; Mitochondria/Caspase Dependant Apoptosis Marker antibody
Calculated Mw	32 kDa
PTM	Acetylation, Phosphoprotein, S-nitrosylation, Zymogen. [UniProt]
Cellular Localization	Cytoplasm. [UniProt]

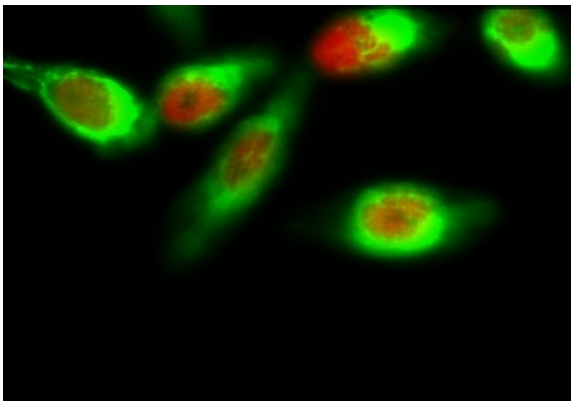
Images



ARG66888 anti-Caspase 3 (cleaved) antibody IHC-Fr image

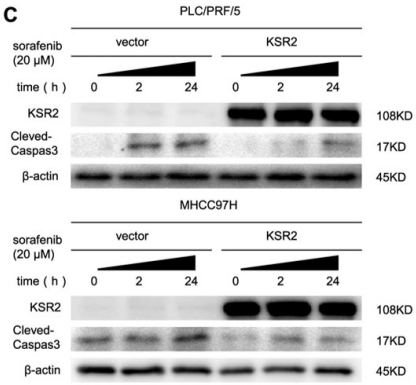
Immunohistochemistry: Frozen human cerebral organoids stained with ARG66888 anti-Caspase 3 (cleaved) antibody.

From Isabel Schultz-Pernice et al. BioRxiv (2023), doi: 10.1101/2023.09.19.558432, Fig. 3. C.



ARG66888 anti-Caspase 3 (cleaved) antibody ICC/IF image

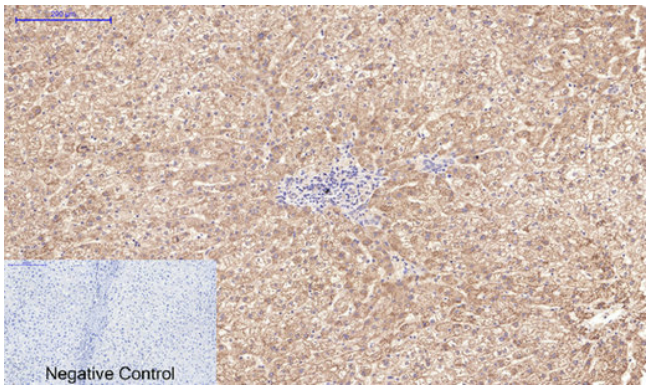
Immunofluorescence: HeLa cells stained with ARG66888 anti-Caspase 3 (cleaved) antibody (green) at 1:200 dilution and co-stained with ARG51617 anti-FOXO1 / FKHR phospho (Ser256) antibody (red) at 1:200 dilution, overnight at 4°C.



ARG66888 anti-Caspase 3 (cleaved) antibody WB image

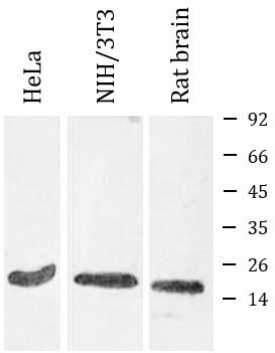
Western blot: Human hepatocellular carcinoma stained with ARG66888 anti-Caspase 3 (cleaved) antibody.

From Gao C et al. Biomark Res (2022), doi: 10.1186/s40364-022-00361-9, Fig. 5. C.



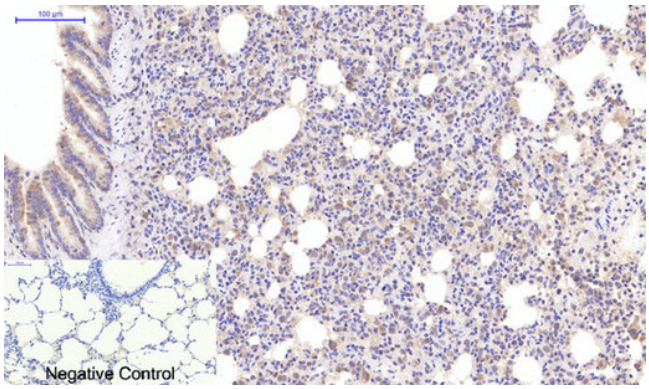
ARG66888 anti-Caspase 3 (cleaved) antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human liver tissue stained with ARG66888 anti-Caspase 3 (cleaved) antibody at 1:200 dilution, overnight at 4°C. Antigen Retrieval: Boil tissue section in Sodium citrate buffer (pH 6.0) for 20 min. Negative control was used by secondary antibody only.



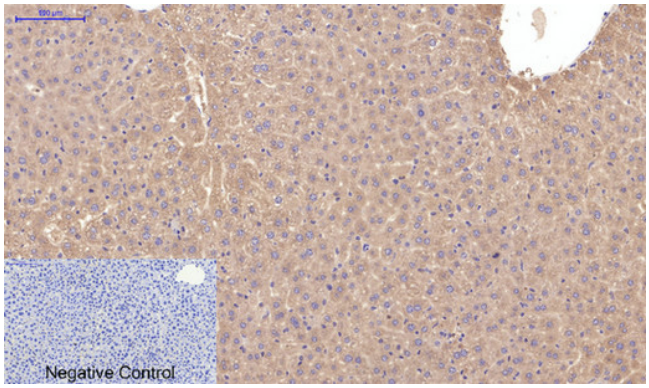
ARG66888 anti-Caspase 3 (cleaved) antibody WB image

Western blot: HeLa, NIH/3T3 and Rat brain lysates stained with ARG66888 anti-Caspase 3 (cleaved) antibody.



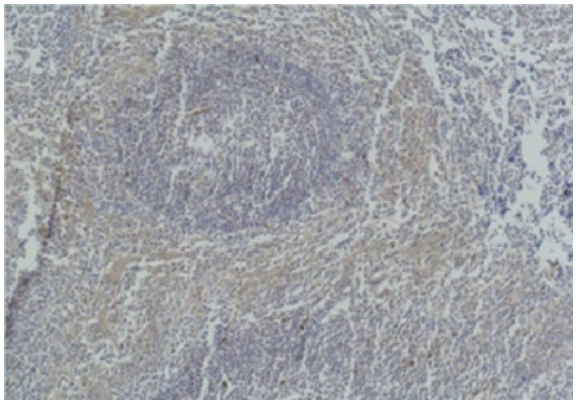
ARG66888 anti-Caspase 3 (cleaved) antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Rat lung tissue stained with ARG66888 anti-Caspase 3 (cleaved) antibody at 1:200 dilution, overnight at 4°C. Antigen Retrieval: Boil tissue section in Sodium citrate buffer (pH 6.0) for 20 min. Negative control was used by secondary antibody only.



ARG66888 anti-Caspase 3 (cleaved) antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Mouse liver tissue stained with ARG66888 anti-Caspase 3 (cleaved) antibody at 1:200 dilution, overnight at 4°C. Antigen Retrieval: Boil tissue section in Sodium citrate buffer (pH 6.0) for 20 min. Negative control was used by secondary antibody only.



ARG66888 anti-Caspase 3 (cleaved) antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human tonsil tissue stained with ARG66888 anti-Caspase 3 (cleaved) antibody.