

Phospho-Caspase 9(S196) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP3044a

Specification

Phospho-Caspase 9(S196) Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW WB, IHC-P,E <u>P55211</u> Human Rabbit Polyclonal Rabbit IgG 46281

Phospho-Caspase 9(S196) Antibody - Additional Information

Gene ID 842

Other Names

Caspase-9, CASP-9, Apoptotic protease Mch-6, Apoptotic protease-activating factor 3, APAF-3, ICE-like apoptotic protease 6, ICE-LAP6, Caspase-9 subunit p35, Caspase-9 subunit p10, CASP9, MCH6

Target/Specificity

This Phospho-Caspase 9-S196 antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding S196 of human caspase 9.

Dilution WB~~1:1000 IHC-P~~1:50~100 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Phospho-Caspase 9(S196) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Phospho-Caspase 9(S196) Antibody - Protein Information

Name CASP9



Synonyms MCH6

Function Involved in the activation cascade of caspases responsible for apoptosis execution. Binding of caspase-9 to Apaf-1 leads to activation of the protease which then cleaves and activates effector caspases caspase-3 (CASP3) or caspase-7 (CASP7). Promotes DNA damageinduced apoptosis in a ABL1/c-Abl-dependent manner. Proteolytically cleaves poly(ADP-ribose) polymerase (PARP). Cleaves BIRC6 following inhibition of BIRC6-caspase binding by DIABLO/SMAC (PubMed:<u>36758105</u>, PubMed:<u>36758106</u>).

Tissue Location

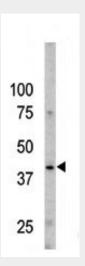
Ubiquitous, with highest expression in the heart, moderate expression in liver, skeletal muscle, and pancreas. Low levels in all other tissues. Within the heart, specifically expressed in myocytes.

Phospho-Caspase 9(S196) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

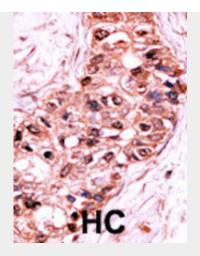
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Phospho-Caspase 9(S196) Antibody - Images



The anti-Phospho-Caspase 9-S196 Pab (Cat. #AP3044a) is used in Western blot to detect Phospho-Caspase 9-S196 in Y79 cell line lysates.





Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

Phospho-Caspase 9(S196) Antibody - Background

Caspase 9 is a member of the cysteine-aspartic acid protease (caspase) family. Sequential activation of caspases plays a central role in the execution-phase of cell apoptosis. Caspases exist as inactive proenzymes which undergo proteolytic processing at conserved aspartic residues to produce 2 subunits, large and small, that dimerize to form the active enzyme. This protein is processed by caspase APAF1; this step is thought to be one of the earliest in the caspase activation cascade.

Phospho-Caspase 9(S196) Antibody - References

Martin, M.C., et al., J. Biol. Chem. 280(15):15449-15455 (2005). Raina, D., et al., J. Biol. Chem. 280(12):11147-11151 (2005). Cornelis, S., et al., Oncogene 24(9):1552-1562 (2005). Mohammad, R.M., et al., Mol. Cancer Ther. 4(1):13-21 (2005). Tacconi, S., et al., Exp. Neurol. 190(1):254-262 (2004). **Phospho-Caspase 9(S196) Antibody - Citations**

• <u>Microenvironment mesenchymal cells protect ovarian cancer cell lines from apoptosis by</u> inhibiting XIAP inactivation.