

Phospho-Caspase 9(S196) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP3044a

Product Information

Application WB, IHC-P, E **Primary Accession** P55211 Reactivity Human Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Clone Names** RB6898 Calculated MW 46281

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/SpecificityThis 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~~1:100~500 E~~Use at an assay dependent concentration.

Format Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. 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.

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 damage- induced 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:36758105, PubMed:36758106).

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.

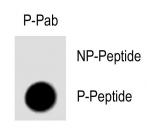
Background

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.

References

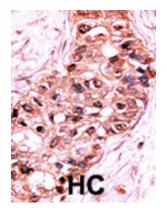
Martin, M.C., et al., J. Biol. Chem. 280(15):15449-15455 (2005). Raina, D., et al., J. Biol. Chem. 280(12):11147-11151 (2005). Cornelis, S., et al., Oncogene 24(9):1552-1562 (2005). Mohammad, R.M., et al., Mol. Cancer Ther. 4(1):13-21 (2005). Tacconi, S., et al., Exp. Neurol. 190(1):254-262 (2004).

Images



Dot Blot

Dot blot analysis of Phospho-Caspase 9(S196) Antibody Phospho-specific Pab (Cat. AP3044a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antobodies working concentration was 0. 5ug per ml.



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.

Citations

Microenvironment mesenchymal cells protect ovarian cancer cell lines from apoptosis by inhibiting XIAP inactivation.
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