



Caspase-8 Monoclonal Antibody(2G12)

Catalog No	YP-Ab-00119
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IF;IHC
Gene Name	CASP8
Immunogen	Recombinant Protein of Caspase-8
Specificity	The antibody detects endogenous Caspase-8 protein.
Formulation	PBS, pH 7.4, containing 0.5%BSA, 0.02% sodium azide as Preservative and 50% Glycerol.
Source	Monoclonal, Mouse
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1:1000-2000 IHC:1:200-500 IF 1:200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	CASP8;Caspase 8;Apoptotic cysteine protease;Apoptotic protease Mch-5;CAP4;Caspase-8;Caspase8;MCH5;CASP-8;FADD-homologous ICE/ced-3-like protease;FADD-like ICE;FLICE;ICE-like apoptotic protease 5;MORT1-associated ced-3 homolog;MACH
Observed Band	43,57kD
Calculated Molecular Weight	43,57kD
Cell Pathway	Cytoplasm . Nucleus .
Tissue Specificity	Isoform 1, isoform 5 and isoform 7 are expressed in a wide variety of tissues. Highest expression in peripheral blood leukocytes, spleen, thymus and liver. Barely detectable in brain, testis and skeletal muscle.
Function	catalytic activity:Strict requirement for Asp at position P1 and has a preferred cleavage sequence of (Leu/Asp/Val)-Glu-Thr-Asp- - (Gly/Ser/Ala)., disease:Defects in CASP8 are the cause of caspase-8 deficiency (CASP8D) [MIM:607271]. CASP8D is a disorder resembling autoimmune lymphoproliferative syndrome (ALPS). It is characterized by lymphadenopathy, splenomegaly, and defective CD95-induced apoptosis of peripheral blood lymphocytes (PBLs). It leads to defects in activation of T-lymphocytes, B-



lymphocytes, and natural killer cells leading to immunodeficiency characterized by recurrent sinopulmonary and herpes simplex virus infections and poor responses to immunization.,domain:Isoform 9 contains a N-terminal extension that is required for interaction with the BCAP31 complex.,function:Most upstream protease of the activation cascade of caspases responsible for the TNFRSF6/FAS mediated and TNF

Background

This gene encodes 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 composed of a prodomain, a large protease subunit, and a small protease subunit. Activation of caspases requires proteolytic processing at conserved internal aspartic residues to generate a heterodimeric enzyme consisting of the large and small subunits. This protein is involved in the programmed cell death induced by Fas and various apoptotic stimuli. The N-terminal FADD-like death effector domain of this protein suggests that it may interact with Fas-interacting protein FADD. This protein was detected in the insoluble fraction of the affected brain region from Huntington disease patients but not in those from normal controls, which implicated the role in neurodegenerative diseases. Many alt

matters needing attention

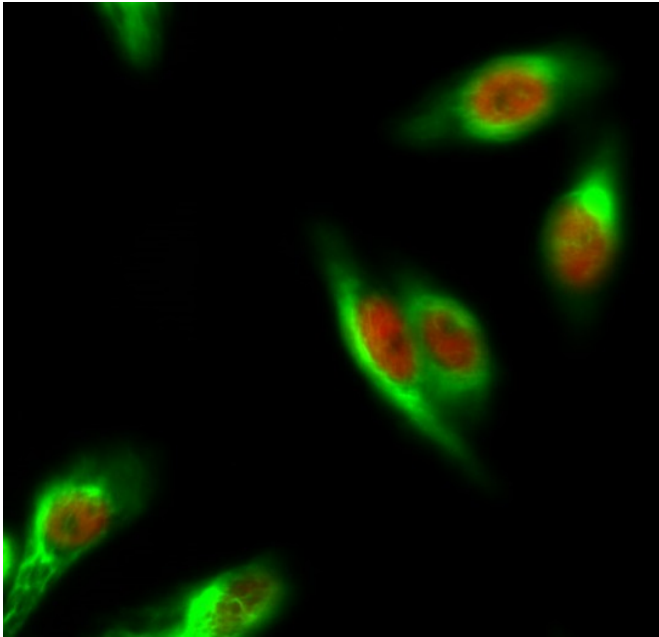
Avoid repeated freezing and thawing!

Usage suggestions

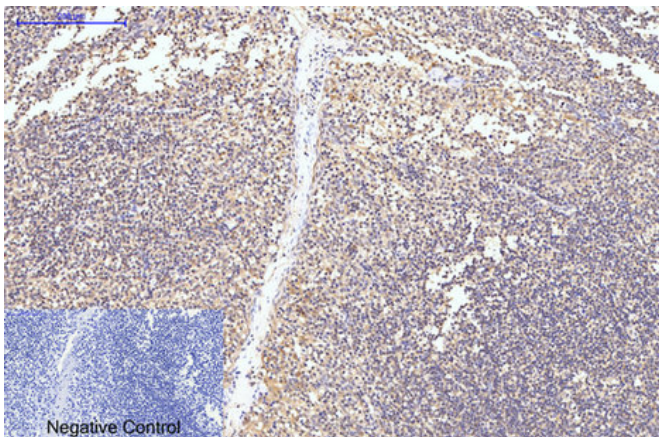
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



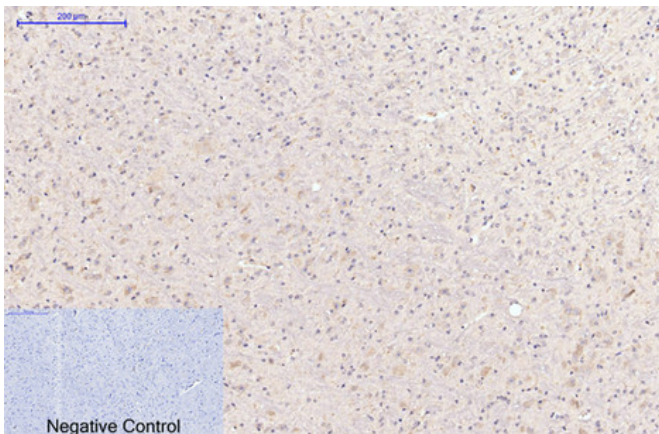
Products Images



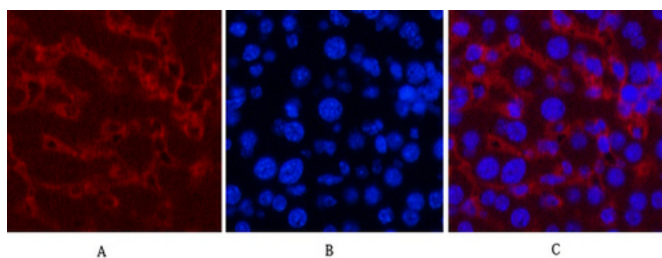
Immunofluorescence analysis of Hela cell. 1, ER α Polyclonal Antibody (red) was diluted at 1:200 (4 $^{\circ}$ overnight). Caspase-8 Monoclonal Antibody (2G12) (green) was diluted at 1:200 (4 $^{\circ}$ overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog: RS3611 was diluted at 1:1000 (room temperature, 50min). Goat Anti Mouse Alexa Fluor 488 Catalog: RS3208 was diluted at 1:1000 (room temperature, 50min).



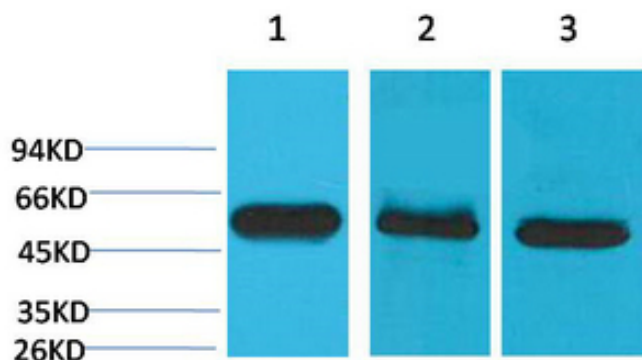
Immunohistochemical analysis of paraffin-embedded Human-Tonsil tissue. 1, Caspase-8 Monoclonal Antibody (2G12) was diluted at 1:200 (4 $^{\circ}$ C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98 $^{\circ}$ C, 20min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30min). Negative control was used by secondary antibody only.



Immunohistochemical analysis of paraffin-embedded Mouse-brain tissue. 1, Caspase-8 Monoclonal Antibody (2G12) was diluted at 1:200 (4 $^{\circ}$ C, overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98 $^{\circ}$ C, 20min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30min). Negative control was used by secondary antibody only.



Immunofluorescence analysis of Mouse-liver tissue. 1, Caspase-8 Monoclonal Antibody(2G12)(red) was diluted at 1:200(4°C, overnight). 2, Cy3 labeled Secondary antibody was diluted at 1:300(room temperature, 50min). 3, Picture B: DAPI(blue) 10min. Picture A: Target. Picture B: DAPI. Picture C: merge of A+B



Western blot analysis of 1) Hela, 2) Mouse Brain Tissue, 3) Rat Brain Tissue using Caspase-8 Monoclonal Antibody.