Caspase-8 (PT0719R) PT™ Rabbit mAb

CatalogNo: YM8528 Recombinant

Key Features

Host Species
- Rabbit

Reactivity
- Human,Mouse,Rat,Pig,Chicken

Applications
- WB,IHC,IF,ELISA

MW
- 55kD (Calculated)

55kD (Observed)

Isotype
- IgG,Kappa

Storage

Storage*	-15°C to -25°C/1 year(Do not lower than -25°C)
Formulation	PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA

Recommended Dilution Ratios

IHC 1:1000-1:4000
WB 1:2000-1:10000
IF 1:200-1:1000
ELISA 1:5000-1:20000

Basic Information

Clonality	Monoclonal
Clone Number	PT0719R

Immunogen Information

Specificity	Rabbit mAb detects endogenous levels of total caspase-8, including the p10 subunit

Target Information

Gene name CASP8 MCH5

Protein Name Caspase8

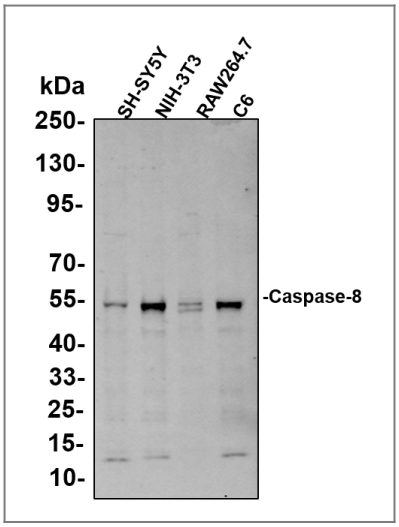
Organism	Gene ID	UniProt ID
Human	841;	Q14790;
Mouse	12370;	O89110;

Cellular Localization Cytoplasm . Nucleus .

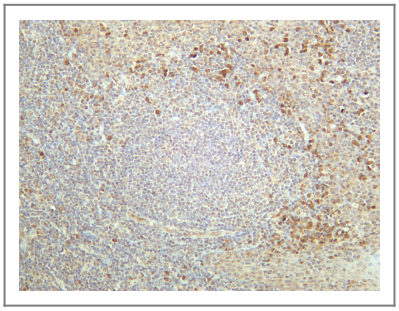
Tissue specificity Isoform 1, isoform 5 and isoform 7 are expressed in a wide variety of tissues. Highest expression in peripheral blood leukocytes, spleen, thymus and liver. Barely detectable in brain, testis and skeletal muscle.

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 TNFRSF1A induced cell death. Binding to the adapter molecule FADD recruits it to either receptor. The resulting aggregate called death-inducing signaling complex (DISC) performs CASP8 proteolytic activation. The active dimeric enzyme is then liberated from the DISC and free to activate downstream apoptotic proteases. Proteolytic fragments of the N-terminal propeptide (termed CAP3, CAP5 and CAP6) are likely retained in the DISC. Cleaves and activates CASP3, CASP4, CASP6, CASP7, CASP9 and CASP10. May participate in the GZMB apoptotic pathways. Cleaves ADPRT. Hydrolyzes the small-molecule substrate, Ac-Asp-Glu-Val-Asp-|-AMC. Likely target for the cowpox virus CRMA death inhibitory protein. Isoforms 5, 6, 7 and 8 lack the catalytic site and may interfere with the pro-apoptotic activity of the complex.,online information:CASP8 mutation db,polymorphism:Genetic vaiations in CASP8 are associated with reduced risk of lung cancer [MIM:211980] in a population of Han Chinese subjects. Genetic vaiations are also associated with decreased risk of cancer of various other forms including esophageal, gastric, colorectal, cervical, and breast, acting in an allele dose-dependent manner.,PTM:Generation of the subunits requires association with the death-inducing signaling complex (DISC), whereas additional processing is likely due to the autocatalytic activity of the activated protease. GZMB and CASP10 can be involved in these processing events.,PTM:Phosphorylated upon DNA damage, probably by ATM or ATR.,similarity:Belongs to the peptidase C14A family.,similarity:Contains 2 DED (death effector) domains.,subunit:Heterotetramer that consists of two anti-parallel arranged heterodimers, each one formed by a 18 kDa (p18) and a 10 kDa (p10) subunit. Interacts with FADD, CFLAR and PEA15. Isoform 9 interacts at the endoplasmic reticulum with a complex containing BCAP31, BAP29, BCL2 and/or BCL2L1. Interacts with TNFAIP8L2.,tissue specificity:Isoforms 1, 5 and 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.,

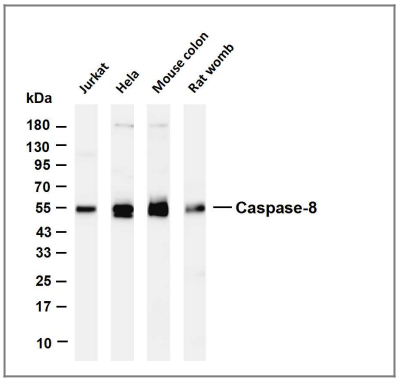
Validation Data



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the primary antibody was used at 4℃, over night with a 1:5000 dilution . The Dylight 800-conjugated Goat anti-Rabbit antibody(Cat:RS23920) was used to detect the antibody. Lane1: SH-SY5Y - Human neuroblastoma cells Lane2: NIH-3T3 - NIH mouse fibroblasts Lane3: RAW264.7 - Mouse mononuclear macrophage leukemia cells Lane4: C6 - Rat glioma cells Predicted band size: 17kDa Observed band size: 17kDa



Human tonsil was stained with anti-Caspase-8 rabbit antibody



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-Caspase-8 antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: Jurkat Lane 2: Hela Lane 3: Mouse colon Lane 4: Rat womb Predicted band size: 55kDa Observed band size: 55kDa

Contact information

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Please scan the QR code to access additional product information:
Caspase-8 (PT0719R) PT™ Rabbit mAb