

Polyclonal Anti-CASP8(P18) Antibody

Catalog Number: PA1735

Description

Gene Name	caspase 8, apoptosis-related cysteine peptidase
Recommended Protein Name	Caspase-8
Lot No.	0171212133554
Size	100µg/vial
Form	lyophilized
Ig type	Rabbit IgG
Specificity	No cross reactivity with other proteins.
Purification	Immunogen affinity purified.
Species	Reacts with: human
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human CASP8(P18)(257-277aa NNHNFAKAREKVPKLHSIRDR).
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg Thimerosal, 0.05mg NaN ₃ .

Application

	Concentration	Tested Species	Predicted Species	Antigen Retrieval
Western blot	0.1-0.5µg/ml	Hu	-	-
Immunohistochemistry (Paraffin-embedded Section)	0.5-1 µg/ml	Hu	-	By Heat

Tested Species: In-house tested species with positive results.

Predicted Species: Species predicted to be fit for the product based on sequence similarities.

By Heat: Boiling the paraffin sections in 10mM citrate buffer, pH6.0, for 20mins is required for the staining of formalin/paraffin sections.

Other applications have not been tested.

Optimal dilutions should be determined by end users.

Preparation and storage

Reconstitution: 0.2ml of distilled water will yield a concentration of 500µg/ml.

Storage: At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time.

Avoid repeated freezing and thawing.

Relevant detection systems

Boster provides a series of assays reacted with primary antibodies. Antibody can be supported by chemiluminescence kit EK1002 in WB, supported by SA1022 in IHC(P).

Background

Caspase 8 is a caspase protein. It most likely acts upon caspase 3. This gene encodes a member of the cysteine-aspartic acid protease (caspase) family. The human CASP8 gene, whose product is also known as caspase 8 and FLICE, encodes an interleukin-1beta converting enzyme (ICE)-related cysteine protease that is activated by the engagement of several different death receptors. Caspase 8 is immediately recruited to the Fas receptor once it oligomerizes, and its protease activity is crucial for the apoptotic response generated by the resulting death-inducing signaling complex (DISC). This gene contains at least 11 exons spanning approximately 30kb on human chromosome band 2q33-34. This region of human chromosome 2 was previously reported as the location of the CASP10 gene, whose product is closely related to caspase 8.¹ Caspase-8 deficiency in humans is compatible with normal development and shows that caspase-8 has a postnatal role in immune activation of naive lymphocytes.²

Reference

1. Grenet, J.; Teitz, T.; Wei, T.; Valentine, V.; Kidd, V. J. : Structure and chromosome localization of the human CASP8 gene. *Gene* 226: 225-232, 1999.
2. Chun, H. J.; Zheng, L.; Ahmad, M.; Wang, J.; Speirs, C. K.; Siegel, R. M.; Dale, J. K.; Puck, J.; Davis, J.; Hall, C. G.; Skoda-Smith, S.; Atkinson, T. P.; Straus, S. E.; Lenardo, M. J. : Pleiotropic defects in lymphocyte activation caused by caspase-8 mutations lead to human immunodeficiency. *Nature* 419: 395-399, 2002.