

Product Information

Anti-FLIP α , C-Terminal

produced in rabbit, IgG fraction of antiserum

Catalog Number **F6550**

Synonyms: Anti-Casper, Anti-I-FLICE, Anti-FLAME-1, Anti-CASH, Anti-CLARP

Product Description

Anti-FLIP α , C-Terminal is produced in rabbit using as immunogen a synthetic peptide corresponding to amino acids 447-464 of the C-terminal of human FLICE-inhibitory protein (FLIP α /FLIP $_L$)¹.

Anti-FLIP α detects human FLIP α (55 kDa) by immunoblotting.

Apoptosis plays an important role in tissue homeostasis and is related to many diseases. The death receptors induce apoptosis after triggering with ligand or agonistic antibodies.² The best-characterized member of the death receptor subfamily is CD95 (APO-1, Fas).

Stimulation of CD95 leads to clustering of the receptor. This enables the adapter molecule FADD/MORT1^{3,4} and the death protease caspase-8 (FLICE, MACH, MCH5),⁵⁻⁷ to bind to the receptor via homophilic death domain and death effector domain (DED) interactions, respectively, forming the death-inducing signaling complex (DISC).⁸ Recruitment of caspase-8 to the DISC leads to its proteolytic activation, which initiates a cascade of caspases, leading to apoptosis (⁹).

Viral FLICE-inhibitory proteins (v-FLIPs)¹⁰⁻¹² are composed of two death effector domains, a structure resembling the N-terminal half of caspase-8. Via DED-DED interaction, v-FLIPs are recruited to the CD95 DISC,¹⁰ preventing caspase-8 recruitment and processing and thereby CD95-induced apoptosis.

Human FLIP was identified by different groups and termed c-FLIP,¹³ CASH,¹ Casper,¹⁴ CLARP,¹⁵ FLAME,¹⁶ I-FLICE,¹⁷ MRIT¹⁸ and Usurpin.¹⁹ On the mRNA level, c-FLIP seems to exist as multiple splice variants, FLIP α , β , γ and δ , respectively.²⁰ Only two endogenous forms of the protein have been detected, c-FLIP $_{long}$ and c-FLIP $_{short}$.^{12,14,19} c-FLIP is structurally similar to caspase-8, since it contains two death effector domains and a caspase-like domain. However, this domain lacks residues that are important for its

catalytic activity, most notably the cysteine within the active site. The short form of c-FLIP structurally resembles v-FLIP. The role of c-FLIP in apoptosis signaling may be as pro-apoptotic molecule^{1,14,15,18} or as an anti-apoptotic molecule.^{1,13,14,16,17,19} In addition, whether c-FLIP interacts with FADD and/or caspase-8 is not clear. Some groups have reported that c-FLIP can interact with both FADD and caspase-8,^{1,13,14,16,18} while others could only detect an interaction between c-FLIP and caspase-8.^{15,17,19}

Reagents

Supplied at 1 mg/ml in phosphate buffered saline containing 0.02% sodium azide.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Antibody can be stored at 2-8 °C for three months and at -20 °C for one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Product Profile

Immunoblotting: the recommended concentration is 0.5-1 μ g/ml using total HeLa cell lysate.

Note: In order to obtain best results and assay sensitivities of different techniques and preparations, we recommend determining optimal working dilutions by titration test.

References

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