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Product Information

Anti-FLIP$_L$, C-Terminal
produced in rabbit, IgG fraction of antiserum

Catalog Number **F9675**

Synonym: Anti-CASHα

Product Description

Anti-FLIP$_L$, C-Terminal is produced in rabbit using as immunogen a synthetic peptide corresponding to amino acids 449-465 of the C-terminal of mouse FLICE-inhibitory protein (FLIP)[1,2].

Anti-FLIP$_L$ detects mouse FLIP$_L$ (53 kDa) by immunoblotting. The antibody does not detect the short form (FLIP$_S$).

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.[3] 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[4, 5] and the death protease caspase-8 (FLICE, MACH, MCH5),[6-8] to bind to the receptor via homophilic death domain and death effector domain (DED) interactions, respectively, forming the death-inducing signaling complex (DISC).[9] Recruitment of caspase-8 to the DISC leads to its proteolytic activation, which initiates a cascade of caspases, leading to apoptosis.[10]

Viral FLICE-inhibitory proteins (v-FLIPs)[11-13] 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,[11] preventing caspase-8 recruitment and processing and thereby CD95-induced apoptosis.

Human FLIP was identified by different groups and termed c-FLIP,[2] CASH,[1] Casper,[14] CLARP,[15] FLAME,[16] I-FLICE,[17] MRIT[18] and Usurpin.[19] On the mRNA level, c-FLIP seems to exist as multiple splice variants, FLIPα, β, γ and δ, respectively.[20] Only two endogenous forms of the protein have been detected, c-FLIP$_{long}$ and c-FLIP$_{short}$.[13,14,19] 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.[1,2,14,16,17,19] 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,[1,2,14,16,18] while others could only detect an interaction between c-FLIP and caspase-8.[15,17,19]

Reagent

Supplied at 0.5 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 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: FLIP antibody can be used for the detection of FLIP by Western blot at 1-2 µg/mL.

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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