

## Product Information

## Anti-FLIP $\gamma/\delta$ , C-Terminal

Produced in Rabbit, Affinity Isolated Antibody

**F9925****Synonyms:** Anti-CLARP; Anti-CASH; Anti-FLAME-1; Anti-I-FLICE

### Product Description

Anti-FLIP $\gamma/\delta$ , C-Terminal is produced in rabbit using as immunogen a synthetic peptide corresponding to amino acids 191-209 of the C-terminal of human FLIP $\delta$ /FLIP $\gamma$ <sup>1</sup>.

Anti-FLIP $\gamma/\delta$ , C-Terminal detects FLIP $\gamma$  (35 kDa) and FLIP $\delta$ /FLIP $\gamma$  (25 kDa) by immunoblotting. The antibody reacts with human and mouse FLIP $\gamma/\delta$ .

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.<sup>2</sup> 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<sup>3,4</sup> and the death protease caspase-8 (FLICE, MACH, MCH5),<sup>5-7</sup> to bind to the receptor via homophilic death domain and death effector domain (DED) interactions, respectively, forming the death-inducing signaling complex (DISC).<sup>8</sup> Recruitment of caspase-8 to the DISC leads to its proteolytic activation, which initiates a cascade of caspases, leading to apoptosis.<sup>9</sup>

Viral FLICE-inhibitory proteins (v-FLIPs)<sup>10-12</sup> 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,<sup>10</sup> preventing caspase-8 recruitment and processing and thereby CD95-induced apoptosis.

Human FLIP was identified by different groups and termed c-FLIP,<sup>1</sup> CASH,<sup>13</sup> Casper,<sup>14</sup> CLARP,<sup>15</sup> FLAME,<sup>16</sup> I-FLICE,<sup>17</sup> MRIT<sup>18</sup> and Usurpin.<sup>19</sup> On the mRNA level, c-FLIP seems to exist as multiple splice variants, FLIP $\alpha$ ,  $\beta$ ,  $\gamma$  and  $\delta$ , respectively.<sup>20,21</sup> Only two endogenous forms of the protein have been detected, c-FLIP<sub>long</sub> and c-FLIP<sub>short</sub>.<sup>13,14,19</sup> 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<sup>13,14,15,18</sup> or as an anti-apoptotic molecule.<sup>1, 13,14,16,17,19</sup> 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,<sup>1, 13,14,16,18</sup> while others could only detect an interaction between c-FLIP and caspase-8.<sup>15,17,19</sup>

### Reagent

Solution in 0.01 M phosphate buffered saline, containing 0.02% sodium azide.

### Precautions and Disclaimer

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:** the recommended dilution is 1:1000. A Jurkat (human T lymphocyte) cell lysate may be used as a positive control. Both 35 kDa and 25 kDa bands are detected.

**Immunocytochemistry:** 2 µg/mL

**Immunofluorescence:** 10 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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