

caspase-8

Cat. No. EXWM-4237

Lot. No. (See product label)

Introduction

Description

Caspase-8 is an initiator caspase, as are caspase-2 (EC 3.4.22.55), caspase-9 (EC 3.4.22.62) and caspase-10 (EC 3.4.22.63). Caspase-8 is the apical activator of the extrinsic (death receptor) apoptosis pathway, triggered by death receptor ligation. It contains two tandem death effector domains (DEDs) in its N-terminal prodomain, and these play a role in procaspase activation. This enzyme is linked to cell surface death receptors such as Fas. When Fas is aggregated by the Fas ligand, procaspase-8 is recruited to the death receptor where it is activated. The enzyme has a preference for Glu at P3 and prefers small residues, such as Gly, Ser and Ala, at the P1' position. It has very broad P4 specificity, tolerating substrates with Asp, Val or Leu in this position. Endogenous substrates for caspase-8 include procaspase-3, the pro-apoptotic Bcl-2 family member Bid, RIP, PAK2 and the caspase-8 activity modulator FLIPL. Belongs in peptidase family C14.

Synonyms

FLICE, FADD-like ICE; MACH; MORT1-associated CED-3 homolog; Mch5; mammalian Ced-3 homolog 5; CASP-8; ICE-like apoptotic protease 5; FADD-homologous ICE/CED-3-like protease; apoptotic cysteine protease; apoptotic protease Mch-5; CAP4

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 3.4.22.61

CAS No.

179241-78-2

Reaction

Strict requirement for Asp at position P1 and has a preferred cleavage sequence of (Leu/Asp/Val)-Glu-Thr-Asp↓(Gly/Ser/Ala)

Notes

This item requires custom production and lead time is between 5-9 weeks. We can custom produce according to your specifications.

Storage and Shipping Information

Storage

Store it at +4 °C for short term. For long term storage, store it at -20 °C~-80 °C.