

caspase-10

Cat. No. EXWM-4239

Lot. No. (See product label)

Introduction

Description

Caspase-10 is an initiator caspase, as are caspase-2 (EC 3.4.22.55), caspase-8 (EC 3.4.22.61) and caspase-9 (EC 3.4.22.62). Like caspase-8, caspase-10 contains two tandem death effector domains (DEDs) in its N-terminal prodomain, and these play a role in procaspase activation. The enzyme has many overlapping substrates in common with caspase-8, such as RIP (the cleavage of which impairs NF-κB survival signalling and starts the cell-death process) and PAK2 (associated with some of the morphological features of apoptosis, such as cell rounding and apoptotic body formation). Bid, a Bcl2 protein, can be cleaved by caspase-3 (EC 3.4.22.56), caspase-8 and caspase-10 at Lys-Gln-Thr-Asp↓ to yield the pro-apoptotic p15 fragment. The p15 fragment is N-myristoylated and enhances the release of cytochrome c from mitochondria (which, in turn, initiates the intrinsic apoptosis pathway). Bid can be further cleaved by caspase-10 and granzyme B but not by caspase-3 or caspase-8 at Ile-Glu-Thr-Asp↓ to yield a p13 fragment that is not N-myristoylated. Belongs in peptidase family C14.

Synonyms

FLICE2, Mch4; CASP-10; ICE-like apoptotic protease 4; apoptotic protease Mch-4; FAS-associated death domain protein interleukin-1β-converting enzyme 2

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 3.4.22.63

CAS No.

189088-85-5

Reaction

Strict requirement for Asp at position P1 and has a preferred cleavage sequence of Leu-Gln-Thr-Asp↓Gly

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.