

Datasheet for ABIN3090487

Caspase 3 Protein (CASP3) (AA 29-175) (His tag)



Overview

Overview	
Quantity:	1 mg
Target:	Caspase 3 (CASP3)
Protein Characteristics:	AA 29-175
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Caspase 3 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA, Crystallization (Crys)
Product Details	
Sequence:	SGISLDNSYK MDYPEMGLCI IINNKNFHKS TGMTSRSGTD VDAANLRETF RNLKYEVRNK
	NDLTREEIVE LMRDVSKEDH SKRSSFVCVL LSHGEEGIIF GTNGPVDLKK ITNFFRGDRC
	RSLTGKPKLF IIQACRGTEL DCGIETD
	Sequence without tag. Tag location is at the discretion of the manufacturer. If you have a
	special request, please contact us.
Characteristics:	 Made in Germany - from design to production - by highly experienced protein experts. Human CASP3 Protein (raised in Insect Cells) purified by multi-step, protein-specific process to ensure crystallization grade. State-of-the-art algorithm used for plasmid design (Gene synthesis).
	This protein is a made to order protein and will be made for the first time for your order. Our
	experts in the lab will ensure that you receive a correctly folded protein.
	The big advantage of ordering our made-to-order proteins in comparison to ordering custom

made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

In the unlikely event that the protein cannot be expressed or purified we do not charge anything (other companies might charge you for any performed steps in the expression process for custom-made proteins, e.g. fees might apply for the expression plasmid, the first expression experiments or purification optimization).

When you order this made-to-order protein you will only pay upon receival of the correctly folded protein. With no financial risk on your end you can rest assured that our experienced protein experts will do everything to make sure that you receive the protein you ordered.

The concentration of our recombinant proteins is measured using the absorbance at 280nm.

The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer.

The concentration of the protein is calculated using its specific absorption coefficient. We use the Expasy's protparam tool to determine the absorption coefficient of each protein.

Purification:

Two step purification of proteins expressed in baculovirus infected SF9 insect cells:

- 1. In a first purification step, the protein is purified from the cleared cell lysate using three different His-tag capture materials: high yield, EDTA resistant, or DTT resistant. Eluate fractions are analyzed by SDS-PAGE.
- 2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.

Purity:

>95 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.

Sterility:

0.22 µm filtered

Endotoxin Level:

Protein is endotoxin free.

Grade:

Crystallography grade

Target Details

Target:	Caspase 3 (CASP3)
Alternative Name:	CASP3 (CASP3 Products)
Background:	Involved in the activation cascade of caspases responsible for apoptosis execution. At the
	onset of apoptosis it proteolytically cleaves poly(ADP-ribose) polymerase (PARP) at a '216-Asp-
	-Gly-217' bond. Cleaves and activates sterol regulatory element binding proteins (SREBPs)
	between the basic helix-loop-helix leucine zipper domain and the membrane attachment

Target Details

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	domain. Cleaves and activates caspase-6, -7 and -9. Involved in the cleavage of huntingtin.
	Triggers cell adhesion in sympathetic neurons through RET cleavage.
	{ECO:0000269 PubMed:21357690, ECO:0000269 PubMed:7596430}.
Molecular Weight:	17.6 kDa Including tag.
UniProt:	P42574
Pathways:	Apoptosis, Caspase Cascade in Apoptosis, Sensory Perception of Sound, ER-Nucleus Signaling,
	Positive Regulation of Endopeptidase Activity, Activated T Cell Proliferation
Application Details	
Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies
	as well. As the protein has not been tested for functional studies yet we cannot offer a gurantee
	though.
Comment:	In cases in which it is highly likely that the recombinant protein with the default tag will be
	insoluble our protein lab may suggest a higher molecular weight tag (e.g. GST-tag) instead to
	increase solubility. We will discuss all possible options with you in detail to assure that you
	receive your protein of interest.
Restrictions:	For Research Use only
Handling	
Format:	Liquid
Buffer:	100 mM NaCL, 20 mM Hepes, 10% glycerol. pH value is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)