Datasheet for ABIN1096131

BID Protein (AA 1-195)

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Overview

Quantity:	50 µg
Target:	BID
Protein Characteristics:	AA 1-195
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant

Product Details

Purpose:	Recombinant Human BH3-Interacting Domain Death Agonist/BID
Sequence:	MDCEVNNGSS LRDECITNLL VFGFLQSCSD NSFRRELDAL GHELPVLAPQ WEGYDELQTD GNRSSHSRLG RIEADSESQE DIIRNIARHL AQVGDSMDRS IPPGLVNGLA LQLRNTSRSE EDRNRDLATA LEQLLQAYPR DMEKEKTMLV LALLLAKKVA SHTPSLLRDV FHTTVNFINQ NLRTYVRSLA RNGMD
Characteristics:	Recombinant Human BH3-Interacting Domain Death Agonist/BID is produced with our E. coli expression system. The target protein is expressed with sequence (Met1-Asp195) of Human BID protein.
Purity:	> 95 % as determined by reducing SDS-PAGE.
Sterility:	0.2 µm filtered
Endotoxin Level:	Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test

Target Details

Target:	BID
Alternative Name:	bid-protein (BID Products)
Background:	BH3-Interacting Domain Death Agonist (BID) is a member of the Bcl-2 protein family which regulates outer mitochondrial membrane permeability. BID is a pro-apoptotic member that causes cytochrome c to be released from the mitochondria intermembrane space into the cytosol. Interaction of Bid with Bak causes altered mitochondrial membrane permeability. BID contains only the BH3 domain, which is required for its interaction with the Bcl-2 family proteins and for its pro-death activity. BID is susceptible to proteolytic cleavage by caspases, calpains, Granzyme B and cathepsins. It is an integrating key regulator of the intrinsic death pathway that amplifies caspase-dependent and caspase-independent execution of neuronal apoptosis. Therefore pharmacological inhibition of BID provides a promising therapeutic strategy in neurological diseases where programmed cell death is prominent, and also offer a new strategy for the treatment of acute renal failure associated with ischemia-reperfusion. BID receives direct inputs from a key regulator of the cell cycle arrest/DNA repair machinery (ATM), and therefore is an excellent candidate to coordinate genotoxic stress responses and apoptotic cell death. BID is a novel pro-apoptosis Bcl-2 family protein that is activated by caspase 8 in response to Fas/TNF-R1 death receptor signals. Deletion of BID inhibits carcinogenesis in the liver, although this genetic alteration promotes tumorigenesis in the myeloid cells. This is likely related to the function of BID to promote cell cycle progression into S phase. BID could be also involved in the maintenance of genomic stability by engaging at mitosis checkpoint. Alternative Names: BH3-Interacting Domain Death Agonist, p22 BID, BID
Molecular Weight:	21.99 kDa
UniProt:	P55957
Pathways:	Apoptosis, Caspase Cascade in Apoptosis, Positive Regulation of Endopeptidase Activity

Application Details

Restrictions:	For Research Use only

Handling

Format:	Liquid
Reconstitution:	It is not recommended to reconstitute to a concentration less than 100 µg/mL. Dissolve the lyophilized protein in ddH2O. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

Handling

Buffer:	Supplied as a 0.2 µm filtered solution of 20 mM PB, 100 mM KCl, pH 7.4.
Handling Advice:	Always centrifuge tubes before opening. Do not mix by vortex or pipetting.
Storage:	-80 °C
Storage Comment:	Store at < -20°C, stable for 6 months after receipt. Please minimize freeze-thaw cycles.
Expiry Date:	6 months

