Recombinant Human BCL2L1/Bcl-XL Protein (His Tag)

Catalog Number: PKSH031599

Note: *Centrifuge before opening to ensure complete recovery of vial contents.*

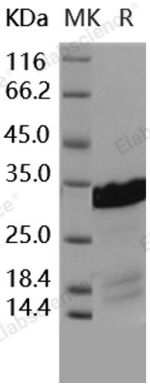
Description

Species	Human
Source	E.coli-derived Human BCL2L1/Bcl-XL protein Met 1-Arg 212, with an C-terminal His
Calculated MW	25.2 kDa
Observed MW	32 kDa
Accession	NP_612815.1
Bio-activity	1. Immobilized human BID at 10 μg/mL (100 μl/well) can bind biotinylated human BCL2L1, The EC_{50} of biotinylated human BCL2L1 is 7.1 ng/mL. 2. Immobilized mouse BID at 10 μg/mL (100 μl/well) can bind biotinylated human BCL2L1, The EC_{50} of biotinylated human BCL2L1 is 7.01 ng/mL.

Properties

Purity	> 85% as determined by reducing SDS-PAGE.
Endotoxin	Please contact us for more information.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile 20 mM Tris, pH 8.0 Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



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Background

B-cell lymphoma-extra large (Bcl-xl) is a transmembrane molecule in the mitochondria. Bcl-xL (BCL2L1), belongs to the Bcl-2 family. Members of the bcl-2 family encode proteins that function either to promote or to inhibit apoptosis. Antiapoptotic members such as Bcl-2 and Bcl-xL prevent PCD in response to a wide variety of stimuli to take part in cancer survival. Conversely, proapoptotic proteins, exemplified by Bax and Bak, can accelerate death and in some instances are sufficient to cause apoptosis independent of additional signals. The crystal and solution structures of a Bcl-2 family member, Bcl-xL is like this: The structures consist of two central, primarily hydrophobic α-helices, which are surrounded by amphipathic helices. A 60-residue loop connecting helices α l and α2 was found to be flexible and non-essential for anti-apoptotic activity. Bcl-xL is chareacterized as important factors in autophagy, inhibiting Beclin 1-mediated autophagy by binding to Beclin 1. In addition, Beclin 1, Bcl-2 and Bcl-xL can cooperate with Atg5 or Ca2+ to regulate both autophagy and apoptosis. Bcl-xL is also implicated in anoxia induced cell death. The pathway is initiated by the loss of function of the prosurvival Bcl-2 family members Mcl-1 and Bcl-2/Bcl-XL, resulting in Bax- or Bak-dependent release of cytochrome c and subsequent caspase-9-dependent cell death. Thus, Bcl-xL, the well-characterized apoptosis guards, appears to be important in cell death.

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