Human BCL2 / Bcl-2 Protein (His Tag)

Catalog Number: **10195-H08E**

Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

Bcl-2; PPP1R50; AW986256; Bcl-2; C430015F12Rik; D630044D05Rik; D830018M01Rik

Protein Construction:

A DNA sequence encoding the human BCL2 isoform 1 (P10415-) (Met 1-Asp 211) was expressed, with a polyhistide tag at the C-terminus.

Source: Human

Expression Host: E. coli

QC Testing

Purity: > 90 % as determined by SDS-PAGE

Bio Activity:

Measured by its binding ability in a functional ELISA. Immobilized human BCL2-His at 10 μg/ml (100 μl/well) can bind biotinylated mouse BCL2L1-His (Cat:50012-M08E), The EC_{50} of biotinylated mouse BCL2L1-His (Cat:50012-M08E) is 0.07-0.15 μg/ml.

Endotoxin:

Please contact us for more information.

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Met 1

Molecular Mass:

The recombinant human BCL2 consisting of 221 amino acids and has a calculated molecular mass of 24.7 kDa. It migrates as an approximately 32 KDa band in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile 50mM Tris, 20% glycerol, 100mM Arg, pH 8.5

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

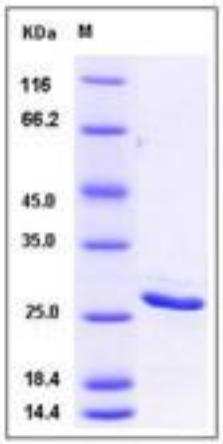
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

BCL2 (B-cell leukemia/lymphoma 2, N-Histidine-tagged), also known as Bcl-2, belongs to the Bcl-2 family. Bcl-2 family proteins regulate and contribute to programmed cell death or apoptosis. It is a large protein family and all members contain at least one of four BH (bcl-2 homology) domains. Certain members such as Bcl-2, Bcl-xl and Mcl1 are anti-apoptotic, whilst others are pro-apoptotic. Most Bcl-2 family members contain a C-terminal transmembrane domain that functions to target these proteins to the outer mitochondrial and other intracellular membranes. It is expressed in a variety of tissues. BCL2 blocks the apoptotic death of some cells such as lymphocytes. It also regulates cell death by controlling the mitochondrial membrane permeability and inhibits caspase activity either by preventing the release of cytochrome c from the mitochondria and/or by binding to the apoptosis-activating factor. Constitutive expression of BCL2, such as in the case of translocation of BCL2 to Ig heavy chain locus, is thought to be the cause of follicular lymphoma. Two transcript variants, produced by alternate splicing, differ in their C-terminal ends.

References

1.Tsujimoto Y, *et al.* (1984) Cloning of the chromosome breakpoint of neoplastic B cells with the t(14;18) chromosome translocation. Science. 226(4678):1097-99.
2.Cleary ML, *et al.* (1986) Cloning and structural analysis of cDNAs for bcl-2 and a hybrid bcl-2/immunoglobulin transcript resulting from the t(14;18) translocation. Cell. 47(1):19-28.
3.Otake Y, *et al.* (2007) Overexpression of nucleolin in chronic lymphocytic leukemia cells induces stabilization of Bcl-2 / Bcl-2 mRNA. Blood. 109(7):3069-75.