Data Sheet (Cat.No.TMPY-02700)

TargetMol

BCL2 Protein, Human, Recombinant (His)

General Information

Synonyms:	Bcl-2;PPP1R50;B-cell CLL/lymphoma 2
Protein Construction:	A DNA sequence encoding the human BCL2 isoform 1 (P10415-1) (Met 1-Asp 211) was expressed, with a polyhistide tag at the C-terminus. Predicted N terminal: Met 1
Species:	Human
Expression Host:	E. coli
Accession:	P10415-1
Molecular Weight:	24.7 kDa (predicted)

QC Testing

Biological 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 , The EC50 of biotinylated mouse BCL2L1-His is 0.07-0.15 μg/ml.
Purity:	> 90 % as determined by SDS-PAGE
Endotoxin:	Please contact us for more information.
Formulation:	Supplied as sterile 50 mM Tris, 20% glycerol, 100 mM Arg, pH 8.5.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store the product under sterile conditions at -20°C to -80°C. Samples are stable for up to 12 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

Proteins are shipped with blue ice.

Protein Background

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.Cancer ImmunotherapyImmune CheckpointImmunotherapyTargeted Therapy

Reference

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.

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.

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.