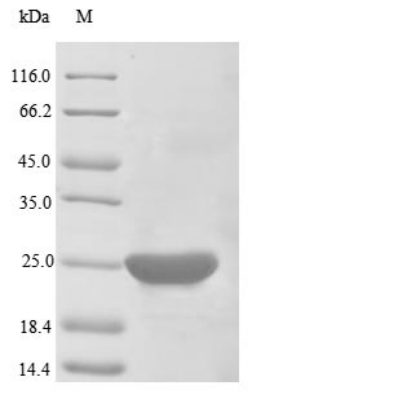
Recombinant Human Apoptosis regulator Bcl-2 (BCL2), partial

Product Code	CSB-EP002611HU1
Abbreviation	Recombinant Human BCL2 protein, partial
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P10415
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 85% as determined by SDS-PAGE.
Sequence	AHAGRTGYDNREIVMKYIHYKLSQRGYEWDAGDVGAAPPGAAPAPGIFSSQP GHTPHPAASRDPVARTSPLQTPAAPGAAAGPALSPVPPVVHLTLRQAGDDFS RRYRRDFAEMSSQLHLTPFTARGRFATVVEELFRDGVNWGRIVAFFEFGGVM CVESVNREMSPLVDNIALWMTEYLNRHLHTWIQDNGGWDAFVELYGPSMRPL FD
Research Area	Others
Source	E.coli
Target Names	BCL2
Protein Names	Recommended name: Apoptosis regulator Bcl-2
Expression Region	2-211aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	C-terminal 10xHis-tagged
Mol. Weight	25.2 kDa
Protein Length	Partial
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

Our recombinant human apoptosis regulator BCL2 is co-expressed with a C-terminal 10xHis-tag in E. coli. It covers the 2-211aa of the human BCL2. Its purity level exceeds 85% confirmed by SDS-PAGE. It is available in liquid or lyophilized powder form. This recombinant BCL2 protein is ideally suited for apoptosis-related research, offering high-quality performance in various experimental applications.

The BCL2 protein is a critical regulator of apoptosis, functioning primarily as an anti-apoptotic factor. BCL2 is predominantly localized in the outer mitochondrial membrane but is also found in the nuclear and endoplasmic reticulum membranes [1]. Its primary function is to prevent the release of cytochrome c from mitochondria, a key event that triggers the apoptotic cascade. BCL2 achieves this by regulating the permeability of the mitochondrial membrane and interacting with other BCL2 family proteins, such as BAX and BAK, which promote apoptosis [2]. The overexpression of BCL2 can lead to cancer development, as it allows malignant cells to evade apoptosis [1][3]. This is particularly evident in various lymphomas, where BCL2 translocations are commonly observed, such as in follicular lymphoma [4].

References:
[1] K. Hwang, W. Han, J. Kim, H. Moon, S. Oh, Y. Song, et al., Prognostic influence of bcl2 on molecular subtypes of breast cancer, Journal of Breast Cancer, vol. 20, no. 1, p. 54, 2017. https://doi.org/10.4048/jbc.2017.20.1.54
[2] F. Llambi, T. Moldoveanu, S. Tait, L. Bouchier?Hayes, J. Temirov, L. McCormicket al., A unified model of mammalian bcl-2 protein family interactions at the mitochondria, Molecular Cell, vol. 44, no. 4, p. 517-531, 2011. https://doi.org/10.1016/j.molcel.2011.10.001
[3] J. Gao, Q. Liu, Y. Xü, X. Gong, R. Zhang, C. Zhou, et al., Pparα induces cell apoptosis by destructing bcl2, Oncotarget, vol. 6, no. 42, p. 44635-44642, 2015. https://doi.org/10.18632/oncotarget.5988
[4] J. Iqbal, W. Sanger, D. Horsman, A. Rosenwald, D. Pickering, B. Davé, et al., Bcl2 translocation defines a unique tumor subset within the germinal center b-cell-like diffuse large b-cell lymphoma, American Journal of Pathology, vol. 165, no. 1, p. 159-166, 2004. https://doi.org/10.1016/s0002-9440(10)63284-1

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

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