



# SZABO SCANDIC

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## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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# PRODUCT INFORMATION



## Bfl-1 (human, recombinant)

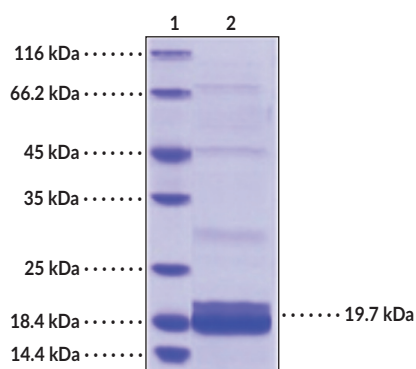
Item No. 41998

### Overview and Properties

**Synonyms:** Bcl-2A1, Bcl-2-related Protein A1, Hemopoietic-specific Early Response Protein  
**Source:** Recombinant human N-terminal His-tagged Bfl-1 expressed in *E. coli*  
**Amino Acids:** 1-152  
**Uniprot No.:** Q16548  
**Molecular Weight:** 19.7 kDa  
**Storage:** -80°C (as supplied)  
**Stability:** ≥1 year  
**Purity:** ≥85% estimated by SDS-PAGE  
**Supplied in:** Lyophilized from sterile PBS, pH 7.4  
**Protein Concentration:** *batch specific* mg/ml

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Image



Lane 1: MW Markers  
Lane 2: Bfl-1

**SDS-PAGE Analysis of Bfl-1.** This protein has a calculated molecular weight of 19.7 kDa.

**WARNING**  
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

**SAFETY DATA**  
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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## Description

Bfl-1, also known as Bcl-2-related protein A1 (Bcl-2A1), is an anti-apoptotic member of the Bcl-2 family of proteins.<sup>1</sup> It is composed of two Bcl-2 homology (BH) domains (BH1 and BH2), which facilitate binding to Bim, Bid, PUMA, and Noxa, putative BH3 and BH4 domains, and a C-terminal region that regulates localization and function.<sup>1,2</sup> Bfl-1 expression can be induced by cytokines such as IL-1 $\beta$  and TNF- $\alpha$  and is primarily expressed in leukocytes, the spleen, and the lungs but is also expressed in the small intestine, testis, and thymus and localizes to the mitochondria.<sup>3,4</sup> However, a short splice variant, Bfl-1S, localizes to the nucleus.<sup>5</sup> Bfl-1 is involved in p53-dependent apoptosis and autophagy.<sup>2,6</sup> Ectopic overexpression of *BCL2A1* induces resistance to the Bcl-2 inhibitor venetoclax (ABT-199; Item No. 16233) in cancer cells, and Bfl-1 is overexpressed in several cancers.<sup>7,8</sup> Cayman's Bfl-1 (human, recombinant) protein consists of 170 amino acids and has a calculated molecular weight of 19.7 kDa.

## References

1. Opfeman, J.T. Attacking cancer's Achilles heel: Antagonism of anti-apoptotic BCL-2 family members. *FEBS J.* **283**(14), 2661-2675 (2016).
2. Klener, P., Sovilj, D., Renesova, N., *et al.* BH3 mimetics in hematologic malignancies. *Int. J. Mol. Sci.* **22**(18), 10157 (2021).
3. Karsan, A., Yee, E., Kaushansky, K., *et al.* Cloning of human Bcl-2 homologue: Inflammatory cytokines induce human A1 in cultured endothelial cells. *Blood* **87**(8), 3089-3096 (1996).
4. Brien, G., Debaud, A.L., Robert, X., *et al.* C-terminal residues regulate localization and function of the antiapoptotic protein Bfl-1. *J. Biol. Chem.* **284**(44), 30257-30263 (2009).
5. Ko, J.-K., Lee, M.-J., Cho, S.-H., *et al.* Bfl-1S, a novel alternative splice variant of Bfl-1, localizes in the nucleus via its C-terminus and prevents cell death. *Oncogene* **22**(16), 2457-2465 (2003).
6. Wang, G., Diepstraten, S.T., and Herold, M.J. Last but not least: BFL-1 as an emerging target for anti-cancer therapies. *Biochem. Soc. Trans.* **50**(4), 1119-1128 (2022).
7. Lou, J., Zhou, Q., Lyu, X., *et al.* Discovery of a covalent inhibitor that overcame resistance to venetoclax in AML cells overexpressing BFL-1. *J. Med. Chem.* **67**(13), 10795-10830 (2024).
8. Vogler, M. BCL2A1: The underdog in the BCL2 family. *Cell Death Differ.* **19**(1), 67-74 (2012).

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