

Recombinant Rat BCL2 Protein

For Research Use Only

1. Basic Product Information

Catalog No.: REP52376

Size: 10ug, 100ug

Protein Name: Apoptosis regulator Bcl-2

Synonym: Bcl2, Bcl-2

UniProt ID: P49950

UniProt Link: www.uniprot.org/uniprotkb/P49950/entry

Species Source: Rat

Expression System: HEK293T eukaryotic cell expression system Sequence

Length: 236 AA

Molecular Weight: 27 KD

Protein Tag: C-terminal His6

2. Amino Acid Sequence

MAQAGRTGYDNREIVMKYIHYKLSQRGYEWDTGDEDSAPLRAAPTPGIFSFQPESNRTPAVHRDTA
ARTSPLRPLVANAGPALSPVPPVVHLTLRRAGDDFSRRYRRDFAEMSSQLHLTPFTARGRFATVVE
ELFRDGVNWGRIVAFEFEGGVMCVESVNREMSPLVDNIALWMTEYLNRLHHTWIQDNGGWDAFVE
LYGPSMRPLFDFSWLSLKTLLSLALVGACITLGAYLGHK

3. Buffer Composition

Liquid format: PBS-based buffer containing 50% glycerol. Glycerol concentration can be customized upon customer request; please state special requirements when placing your order.

Lyophilized format: Buffer before lyophilization is PBS supplemented with 6% trehalose.

4. Storage Conditions

Upon receipt, store the product at -20 °C or -80 °C. Aliquot the product for on-demand use to preserve protein activity and prevent denaturation and inactivation caused by repeated freeze-thaw cycles.

5. Product Description

This product is recombinant Apoptosis regulator Bcl-2 produced using the HEK293T eukaryotic cell expression system. It is suitable for in-vitro functional assays, protein-protein interaction studies, antibody preparation and other biomedical research applications.

Protein Function: Suppresses apoptosis in a variety of cell systems including factor-dependent lymphohematopoietic and neural cells. Regulates cell death by controlling the mitochondrial membrane permeability. Appears to function in a feedback loop system with caspases. Inhibits caspase activity either by preventing the release of cytochrome c from the mitochondria and/or by binding to the apoptosis-activating factor (APAF-1). Also acts as an inhibitor of autophagy: interacts with BECN1 and AMBRA1 during non-starvation conditions and inhibits their autophagy function. May attenuate inflammation by impairing NLRP1-inflammasome activation, hence CASP1 activation and IL1B release.

Subcellular Localization: Mitochondrion outer membrane ; Single-pass membrane protein . Nucleus membrane ; Single-pass membrane protein . Endoplasmic reticulum membrane ; Single-pass membrane protein . Cytoplasm .

6. Notes

- Avoid repeated freeze-thaw cycles to maintain protein stability and biological activity.
- Please specify special buffer-composition requirements at the time of order placement.
- For research use only. Not intended for clinical diagnosis, therapeutic use or commercial manufacturing.