

## Technical Data Sheet

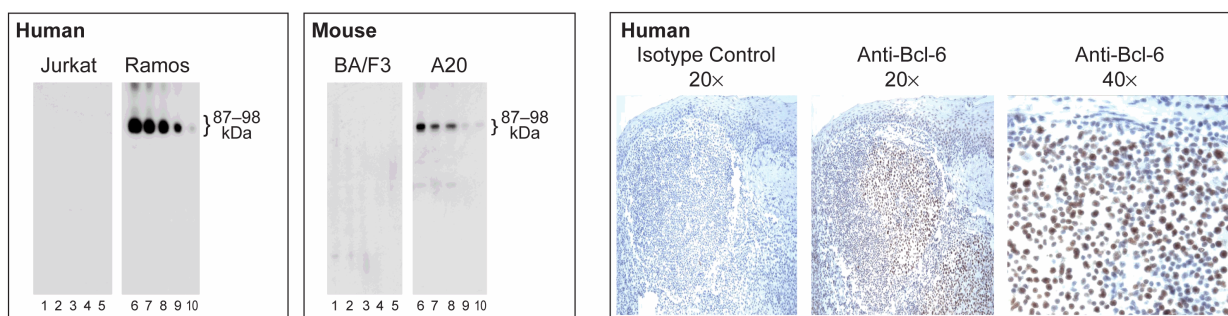
## Purified Mouse anti-Bcl-6

## Product Information

|                         |                                                                  |
|-------------------------|------------------------------------------------------------------|
| <b>Material Number:</b> | <b>561520</b>                                                    |
| <b>Alternate Name:</b>  | BCL6; B-cell lymphoma 6 protein; LAZ3; Laz-3, ZBTB27, ZNF51      |
| <b>Entrez Gene ID:</b>  | 604,12053                                                        |
| <b>Size:</b>            | 0.1 mg                                                           |
| <b>Concentration:</b>   | 0.5 mg/ml                                                        |
| <b>Clone:</b>           | K112-91                                                          |
| <b>Immunogen:</b>       | Human Bcl-6 Recombinant Protein                                  |
| <b>Isotype:</b>         | Mouse IgG1, $\kappa$                                             |
| <b>Reactivity:</b>      | QC Testing: Human<br>Tested in Development: Mouse                |
| <b>Target MW:</b>       | 87–98 kDa                                                        |
| <b>Storage Buffer:</b>  | Aqueous buffered solution containing $\leq 0.09\%$ sodium azide. |

## Description

The K112-91 monoclonal antibody specifically binds to Bcl-6. Bcl-6 was first identified as a proto-oncogene frequently deregulated by chromosomal translocations in non-Hodgkin B-cell lymphomas. It is a nuclear transcriptional repressor of the BTB/POZ zinc-finger family of transcription factors. In addition to its role in cancer, Bcl-6 plays an important role in normal lymphocyte differentiation. Bcl-6 is highly expressed in germinal center B cells, where it promotes the germinal center reaction by inducing proliferation and inhibiting the DNA-damage response. Additionally, Bcl-6 has been identified as a key factor in promoting the differentiation of CD4<sup>+</sup> follicular T helper (T<sub>fh</sub>) cells, which are involved in promoting germinal center formation and providing help to B cells. The interplay of Bcl-6 and another transcriptional repressor, Blimp-1, is thought to be critical in defining the results of both B-cell and T-cell differentiation.

**Analysis of Bcl-6 expression by Western blot and Immunohistochemistry.**

**Left Panel:** Western blot analysis of Bcl-6 expressed by Human Jurkat (Cat. No. 611451) and Ramos cell lines. Cell lysates from untreated Jurkat (lanes 1-5) and Ramos (lanes 6-10) cells (15  $\mu$ g total cellular protein/lane) were electrophoresed (SDS-PAGE), transferred to membranes and then probed with Purified Mouse Anti-Bcl-6 antibody (Clone K112-91; Cat. No. 561520) at concentrations of 2 (lanes 1, 6), 0.667 (lanes 2, 7), 0.222 (lanes 3, 8), 0.074 (lanes 4, 9) and 0.025 (lanes 5, 10)  $\mu$ g/ml. Bcl-6 is identified as a band of ~87-98 kDa in the Ramos cell lysate.

**Middle Panel:** Cell lysates from untreated Mouse BA/F3 (lanes 1-5) and A20 (lanes 6-10) cells (15  $\mu$ g total cellular protein/lane) were electrophoresed (SDS-PAGE), transferred to membranes and then probed with Purified Mouse Anti-Bcl-6 (Clone K112-91; Cat. No. 561520) antibody at concentrations of 2 (lanes 1, 6), 0.667 (lanes 2, 7), 0.222 (lanes 3, 8), 0.074 (lanes 4, 9), and 0.025 (lanes 5, 10)  $\mu$ g/ml. Bcl-6 is identified as a band of ~87-98 kDa in the A20 cell lysate.

**Right Panel:** Bcl-6 staining of human tonsil. Following antigen retrieval with BD Retrieval A buffer (Cat. no. 550524), the formalin-fixed paraffin-embedded sections were stained with either Purified Mouse IgG1  $\kappa$  Isotype Control (Cat. No. 550878; Left Image) or Purified Mouse Anti-Bcl-6 antibody (Clone K112-91; Cat. No. 561520; Middle and Right Images), with Hematoxylin counterstaining. Bcl-6 is detected in the nuclei of the lymphocytes within the lymphoid follicles of the tonsil. Original magnifications: 20X and 40X as shown.

## Preparation and Storage

Store undiluted at 4°C.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

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## Application Notes

### Application

|                                         |                           |
|-----------------------------------------|---------------------------|
| Western blot                            | Routinely Tested          |
| Intracellular staining (flow cytometry) | Tested During Development |
| Immunohistochemistry-paraffin           | Tested During Development |

### Suggested Companion Products

| Catalog Number | Name                                  | Size    | Clone    |
|----------------|---------------------------------------|---------|----------|
| 554002         | HRP Goat Anti-Mouse Ig                | 1.0 ml  | (none)   |
| 612657         | Purified Mouse Anti-Actin Ab-5        | 150 µg  | C4/actin |
| 550524         | Retrievagen A (pH 6.0)                | 1000 ml | (none)   |
| 550878         | Purified Mouse IgG1 κ Isotype Control | 1.0 ml  | MOPC-31C |
| 611451         | Jurkat Cell Lysate                    | 500 µg  | (none)   |

### Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. An isotype control should be used at the same concentration as the antibody of interest.
3. Sodium azide is a reversible inhibitor of oxidative metabolism; therefore, antibody preparations containing this preservative agent must not be used in cell cultures nor injected into animals. Sodium azide may be removed by washing stained cells or plate-bound antibody or dialyzing soluble antibody in sodium azide-free buffer. Since endotoxin may also affect the results of functional studies, we recommend the NA/LE (No Azide/Low Endotoxin) antibody format, if available, for in vitro and in vivo use.
4. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
5. This product is sold under license to the following patent: US Patent No. 6,174,997.
6. Please refer to [www.bdbiosciences.com/pharming/protocols](http://www.bdbiosciences.com/pharming/protocols) for technical protocols.

### References

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