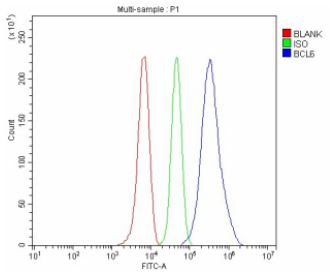
BCL6 Antibody / B-cell lymphoma 6 (FY12375)

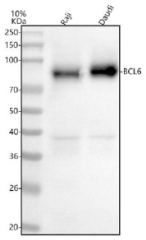
Catalog No.	Formulation	Size
FY12375	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

Availability	1-2 days
Species Reactivity	Human
Format	Lyophilized
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Immunogen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	P41182
Applications	Western Blot : 0.25-0.5ug/ml Flow Cytometry : 1-3ug/million cells ELISA : 0.1-0.5ug/ml
Limitations	This BCL6 antibody is available for research use only.



Flow Cytometry analysis of Raji cells using anti-BCL6 antibody. Overlay histogram showing Raji cells stained with (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-BCL6 antibody (1 ug/million cells) for 30 min at 20oC. DyLight 488 conjugated goat anti-rabbit IgG (5-10 ug/million cells) was used as secondary antibody for 30 minutes at 20oC. Isotype control antibody (Green line) was rabbit IgG (1 ug/million cells) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



Western blot analysis of BCL6 using anti-BCL6 antibody. Lane 1: human Raji whole cell lysates, Lane 2: human Daudi whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-BCL6 antibody at 0.5 ug/ml overnight at 4oC, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal was developed using enhanced chemiluminescent. BCL6 (~79 kDa predicted) typically migrates between 78-100 kDa by Western blot due to extensive phosphorylation, acetylation, and SUMOylation of the native protein.

Description

The BCL6 antibody targets B-cell lymphoma 6 protein, a transcriptional repressor encoded by the BCL6 gene. B-cell lymphoma 6 plays a pivotal role in germinal center B-cell development, proliferation, and differentiation. As a zinc finger transcription factor, it modulates gene expression by recruiting corepressor complexes to DNA binding sites, silencing target genes involved in DNA damage response, apoptosis, and differentiation. The BCL6 antibody enables detection of this key transcriptional regulator, providing an essential reagent for immunology, oncology, and hematopathology research.

B-cell lymphoma 6 is required for the formation and maintenance of germinal centers during immune responses. It represses genes such as TP53 and PRDM1 to allow B cells to proliferate and undergo somatic hypermutation without triggering apoptosis. The BCL6 antibody allows researchers to visualize this dynamic regulation in lymphoid tissues and cell lines, offering insight into B-cell maturation and immune system adaptation. BCL6 expression is transiently induced during the germinal center stage and subsequently downregulated as cells differentiate into plasma or memory B cells.

Aberrant BCL6 expression is implicated in diffuse large B-cell lymphoma (DLBCL) and follicular lymphoma, where chromosomal translocations or mutations disrupt its normal regulation. These alterations lead to constitutive repression of target genes and uncontrolled proliferation. The BCL6 antibody serves as an important diagnostic and research tool for detecting abnormal expression in lymphoma biopsies and assessing therapeutic responses to BCL6 inhibitors. Its use in immunohistochemistry and western blotting allows pathologists to distinguish germinal center B-cell subtypes from activated or memory B cells.

Beyond hematologic malignancies, B-cell lymphoma 6 influences other tissues by modulating inflammation, metabolism, and neural differentiation. In macrophages and T cells, it acts as a transcriptional repressor that controls cytokine production and immune tolerance. The BCL6 antibody enables studies of these non-lymphoid functions, expanding understanding of how this transcription factor integrates immune and metabolic signaling networks. Recent research also links BCL6 to cancer stem cell maintenance and chemoresistance in solid tumors, underscoring its broad biological significance.

NSJ Bioreagents provides the BCL6 antibody as a validated reagent for western blotting, immunofluorescence, and immunohistochemistry. It exhibits strong nuclear staining consistent with the transcriptional role of B-cell lymphoma 6. By enabling reliable detection of this transcription factor, the BCL6 antibody supports research into gene regulation, oncogenesis, and immune development. It remains an indispensable tool for understanding how transcriptional repression orchestrates germinal center biology and how its disruption contributes to cancer pathogenesis.

Application Notes

Optimal dilution of the BCL6 antibody should be determined by the researcher.

Immunogen

E.coli-derived human BCL6 recombinant protein (Position: R28-K336) was used as the immunogen for the BCL6 antibody.

Storage

After reconstitution, the BCL6 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.