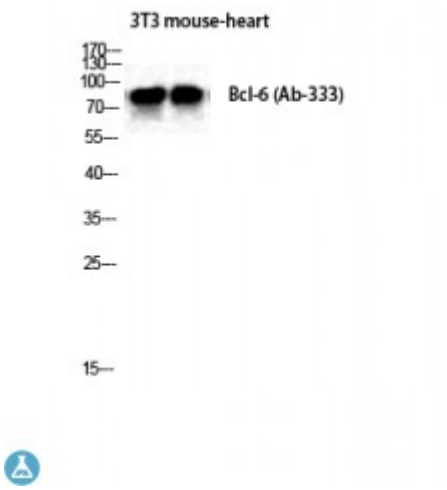
Anti-Bcl-6 antibody



Description	Rabbit polyclonal to Bcl-6.

Model	STJ91839
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, IHC, WB
Immunogen	Synthesized peptide derived from human Bcl-6 around the non-phosphorylation site of S333.
Immunogen Region	270-350 aa
Gene ID	604
Gene Symbol	BCL6
Dilution range	WB 1:500-1:2000IHC 1:100-1:300ELISA 1:40000
Specificity	Bcl-6 Polyclonal Antibody detects endogenous levels of Bcl-6 protein.
Tissue Specificity	Expressed in germinal center T- and B-cells and in primary immature dendritic cells.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	B-cell lymphoma 6 protein BCL-6 B-cell lymphoma 5 protein BCL-5 Protein LAZ-3 Zinc finger and BTB domain-containing protein 27 Zinc finger protein 51

Molecular Weight	90 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:1001OMIM:109565
Alternative Names	B-cell lymphoma 6 protein BCL-6 B-cell lymphoma 5 protein BCL-5 Protein LAZ-3 Zinc finger and BTB domain-containing protein 27 Zinc finger protein 51
Function	Transcriptional repressor mainly required for germinal center (GC) formation and antibody affinity maturation which has different mechanisms of action specific to the lineage and biological functions. Forms complexes with different corepressors and histone deacetylases to repress the transcriptional expression of different subsets of target genes. Represses its target genes by binding directly to the DNA sequence 5'-TTCCTAGAA-3' (BCL6-binding site) or indirectly by repressing the transcriptional activity of transcription factors. In GC B-cells, represses genes that function in differentiation, inflammation, apoptosis and cell cycle control, also autoregulates its transcriptional expression and up-regulates, indirectly, the expression of some genes important for GC reactions, such as AICDA, through the repression of microRNAs expression, like miR155. An important function is to allow GC B-cells to proliferate very rapidly in response to T-cell dependent antigens and tolerate the physiological DNA breaks required for immunglobulin class switch recombination and somatic hypermutation without inducing a p53/TP53-dependent apoptotic response. In follicular helper CD4(+) T-cells (T(FH) cells), promotes the expression of T(FH)-related genes but inhibits the differentiation of T(H)1, T(H)2 and T(H)17 cells. Also required for the establishment and maintenance of immunological memory for both T- and B-cells. Suppresses macrophage proliferation through competition with STAT5 for STAT-binding motifs binding on certain target genes, such as CCL2 and CCND2. In response to genotoxic stress, controls cell cycle arrest in GC B-cells in both p53/TP53-dependedent and -independent manners. Besides, also controls neurogenesis through the alteration of the composition of NOTCH-dependent transcriptional complexes at selective NOTCH targets, such as HES5, including the recruitment of the deacetylase SIRT1 and resulting in an epigenetic silencing leading to neuronal differentiation.
Sequence and Domain Family	The BTB domain mediates homodimerization. Its dimer interface mediates peptide binding such as to corepressors BCOR and NCOR2 . Interaction with corepressors through the BTB domain is needed to facilitate the rapid proliferation and survival of GC B-cells but is not involved in the T(FH) formation and BCL6-mediated suppression of T(H)2 and T(H)17 differentiationrequired for GC formation .
Cellular Localization	Nucleus
Post-translational	Phosphorylated by MAPK1 in response to antigen receptor activation at

Modifications	Ser-333 and Ser-343. Phosphorylated by ATM in response to genotoxic stress. Phosphorylation induces its degradation by ubiquitin/proteasome pathway. Polyubiquitinated. Polyubiquitinated by SCF(FBXO11), leading to its degradation by the proteasome.; Acetylated at Lys-379 by EP300 which inhibits the interaction with NuRD complex and the transcriptional repressor function. Deacetylated by HDAC- and SIR2-dependent pathways.