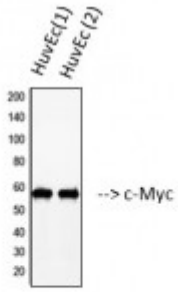
Anti-c-Myc antibody



Western Blot (WB) analysis of HuvEc using c-Myc Polyclonal Antibody from two batches. (STJ92356)

Description	c-Myc is a protein encoded by the MYC gene which is approximately 48,8 kDa. c-Myc is localised to the nucleus. It is involved in signalling by NOTCH1, CDK-mediated phosphorylation and removal of Cdc6 and ERK signalling. It functions as a transcription factor that regulates transcription of specific target genes. It plays a role in cell cycle progression, apoptosis and cellular transformation. c-Myc is expressed in the nervous system, intestine, blood, liver and bone marrow. Mutations in the MYC gene may result in Burkitt lymphoma. STJ92356 was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen. This polyclonal antibody detects endogenous levels of c-Myc protein.

Model	STJ92356
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, IF, IHC, WB
Immunogen	Synthesized peptide derived from human c-Myc
Immunogen Region	360-440 aa, C-terminal
Gene ID	4609
Gene Symbol	MYC
Dilution range	WB 1:500-1:2000IHC 1:100-1:300IF 1:200-1:1000ELISA 1:40000
Specificity	c-Myc Polyclonal Antibody detects endogenous levels of c-Myc protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Note	For Research Use Only (RUO).
Protein Name	Myc proto-oncogene protein Class E basic helix-loop-helix protein 39 bHLHe39 Proto-oncogene c-Myc Transcription factor p64
Molecular Weight	49 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:7553OMIM:113970
Alternative Names	Myc proto-oncogene protein Class E basic helix-loop-helix protein 39 bHLHe39 Proto-oncogene c-Myc Transcription factor p64
Function	Transcription factor that binds DNA in a non-specific manner, yet also specifically recognizes the core sequence 5'-CAC[GA]TG-3'. Activates the transcription of growth-related genes.
Cellular Localization	Nucleus, nucleoplasm Nucleus, nucleolus
Post-translational Modifications	Phosphorylated by PRKDC. Phosphorylation at Ser-329 by PIM2 leads to the stabilization of MYC . Phosphorylation at Ser-62 by CDK2 prevents Ras-induced senescence. Phosphorylated at Ser-62 by DYRK2; this primes the protein for subsequent phosphorylation by GSK3B at Thr-58. Phosphorylation at Thr-58 and Ser-62 by GSK3 is required for ubiquitination and degradation by the proteasome. Ubiquitinated by the SCF(FBXW7) complex when phosphorylated at Thr-58 and Ser-62, leading to its degradation by the proteasome. In the nucleoplasm, ubiquitination is counteracted by USP28, which interacts with isoform 1 of FBXW7 (FBW7alpha), leading to its deubiquitination and preventing degradation. In the nucleolus, however, ubiquitination is not counteracted by USP28, due to the lack of interaction between isoform 4 of FBXW7 (FBW7gamma) and USP28, explaining the selective MYC degradation in the nucleolus. Also polyubiquitinated by the DCX(TRUSS) complex. Ubiquitinated by TRIM6 in a phosphorylation-independent manner .