ARG51538
anti-Myc phospho (Thr58) antibody

Package: 100 µl, 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Myc phospho (Thr58)
Tested Reactivity	Hu, Ms, Rat
Tested Application	IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Myc
Species	Human
Immunogen	Peptide sequence around phosphorylation site of threonine 58 (L-P-T(p)-P-P) derived from Human Myc.
Conjugation	Un-conjugated
Alternate Names	c-Myc; MRTL; MYCC; Class E basic helix-loop-helix protein 39; Proto-oncogene c-Myc; bHLHe39; Myc proto-oncogene protein; Transcription factor p64

Application Instructions

Application table

Application	Dilution
IHC-P	1:50 - 1:100
WB	1:500 - 1:1000

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

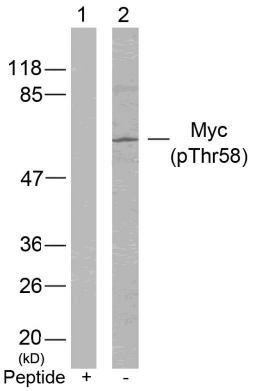
Form	Liquid
Purification	Antibodies were produced by immunizing rabbits with KLH-conjugated synthetic phosphopeptide. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. In addition, non-phospho specific antibodies were removed by chromatogramphy using non-phosphopeptide.
Buffer	PBS (without Mg2+ and Ca2+, pH 7.4), 150mM NaCl, 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

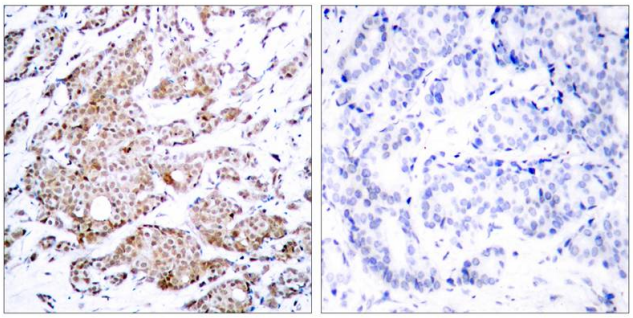
Gene Symbol	MYC
Gene Full Name	v-myc avian myelocytomatosis viral oncogene homolog
Background	Participates in the regulation of gene transcription. Binds DNA in a non-specific manner, yet also specifically recognizes the core sequence 5'-CAC[GA]TG-3'. Seems to activate the transcription of growth-related genes.
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. [UniProt]
Highlight	Related Antibody Duos and Panels: ARG30012 Phospho Myc Antibody Duo (pS62, pS58) ARG30124 Phospho c-Myc Antibody Duo (Total, pT58) ARG30126 Phospho c-Myc Antibody Panel (Total, pT58, pS62) Related products: Myc antibodies; Myc ELISA Kits; Myc Duos / Panels; Anti-Rabbit IgG secondary antibodies;
Research Area	Cancer antibody; Controls and Markers antibody; Developmental Biology antibody; Gene Regulation antibody; Signaling Transduction antibody
Calculated Mw	49 kDa
PTM	Phosphorylated by PRKDC. Phosphorylation at Ser-329 by PIM2 leads to the stabilization of MYC (By similarity). 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 (By similarity).

Images



ARG51538 anti-Myc phospho (Thr58) antibody WB image

Western blot: Extracts from HeLa cells stained with ARG51538 anti-Myc phospho (Thr58) antibody (Lane 2) and the same antibody preincubated with blocking peptide (Lane1).



ARG51538 anti-Myc phospho (Thr58) antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human breast carcinoma tissue stained with ARG51538 anti-Myc phospho (Thr58) antibody (left) or the same antibody preincubated with blocking peptide (right).