

ARG20521 anti-Acetylated Lysine antibody [7F8]

Package: 50 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [7F8] recognizes Acetylated Lysine
Tested Reactivity	Other
Tested Application	ELISA, ICC/IF, IHC-P, IP, WB
Specificity	Detects proteins containing acetylated lysine residues. Does not detect non-acetylated lysine residues.
Host	Mouse
Clonality	Monoclonal
Clone	7F8
Isotype	IgG1
Target Name	Acetylated Lysine
Immunogen	Acetylated KLH
Conjugation	Un-conjugated

Application Instructions

Cross Reactivity Note Species Independent. Bovine albumin and Avian histones have been tested.

Application table

Application	Dilution
ELISA	Assay-dependent
ICC/IF	Assay-dependent
IHC-P	Assay-dependent
IP	Assay-dependent
WB	1:200 - 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	Purification with Protein G.
Buffer	PBS (pH 7.4), 0.09% Sodium azide and 50% Glycerol
Preservative	0.09% 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

Background

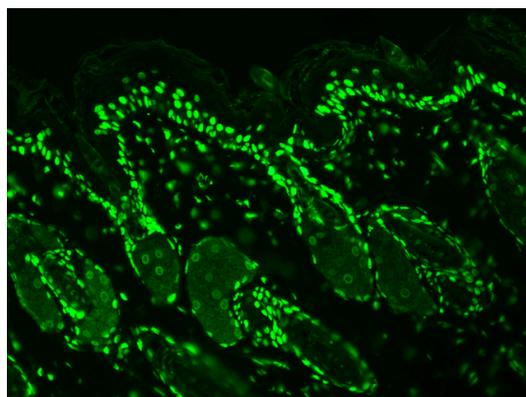
Post-translational modifications of proteins play critical roles in the regulation and function of many known biological processes. Proteins can be post-translationally modified in many different ways, and a common posttranscriptional modification of Lysine involves acetylation (1). The conserved amino-terminal domains of the four core histones (H2A, H2B, H3 and H4) contain lysines that are acetylated by histone acetyltransferases (HATs) and deacetylated by histone deacetylases (HDACs) (2). Protein posttranslational reversible lysine N ε - acetylation and deacetylation have been recognized as an emerging intracellular signaling mechanism that plays critical roles in regulating gene transcription, cell-cycle progression, apoptosis, DNA repair, and cytoskeletal organization (3). The regulation of protein acetylation status is impaired in the pathologies of cancer and polyglutamine diseases (4), and HDACs have become promising targets for anticancer drugs currently in development (5).

1. Yang XJ. (2005). *Oncogene*. 24:1653-1662.
2. Hassig, C.A. and Schreiber, S.L. (1997). *Curr. Opin. Chem. Biol.* 1(3): 300-308.
3. Yang XJ. (2004). *Bioessays* 26:1076-1087.
4. Hughes, R.E. (2002). *Curr. Biol.* 12: R141-R143.
5. Vigushin, D.M. and Coombes, R.C. (2004). *Curr. Cancer Drug Targets* 4: 205-218.

Research Area

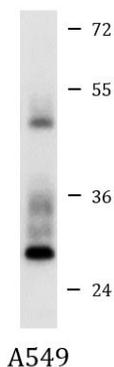
Gene Regulation antibody

Images



ARG20521 anti-Acetylated Lysine antibody [7F8] IHC-P image

Immunohistochemistry: Bouin's fixed and paraffin-embedded Mouse backskin stained with ARG20521 anti-Acetylated Lysine antibody [7F8] at 1:100 for 1 hour at RT. Secondary Antibody: FITC Goat anti-Mouse (green) at 1:50 for 1 hour at RT.



ARG20521 anti-Acetylated Lysine antibody [7F8] WB image

Western blot: A549 cell lysate stained with ARG20521 anti-Acetylated Lysine antibody [7F8] at 1:200 dilution.



ARG20521 anti-Acetylated Lysine antibody [7F8] WB image

Western blot: Acetylated lysine in 1) 75 ng of Acetylated BSA, 2) Non-acetylated BSA, and 3) Marker. The blots were stained with ARG20521 anti-Acetylated Lysine antibody [7F8] at 1:1000 dilution.