abcam

ab92766

PE Anti-acetyl Lysine antibody [7F8]

Anti-acetyl Lysine antibody [7F8] conjugated to PE - suitable for flow cytometry, and reacts with human, mouse, rat samples. Clone [7F8] is a mouse monoclonal antibody.

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Key facts

Isotype	IgG1
Host species	Mouse
Conjugation	PE
Excitation/Emission	Ex: 480;565nm, Em: 578nm
Storage buffer	pH: 7.2 Preservative: 0.013% Sodium azide Constituents: 1.64% Sodium phosphate, 0.58% Sodium chloride
Form	Liquid
Clonality	Monoclonal
Immunogen	Chemical / Small Molecule corresponding to acetyl Lysine.
Clone number	7F8
Purification technique	Affinity purification Immunogen
Specificity	ab92766 is a pan-specific acetyl lysine antibody.
Concentration	0.1 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

Flow Cyt

Expected

Species	Mouse, Rat, Bird, Human, Cow
Dilution info	Use at an assay dependent concentration.
Notes	-

Target data

See full target information acetyl Lysine

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	+4°C
Storage information	Store in the dark

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	Acetyl lysine often referred to as acetylated lysine is a modification of the amino acid lysine where an acetyl group is transferred to the lysine residue. This modification impacts the mass of the lysine residue slightly altering its properties. Acetyl lysine occurs in histone proteins and this modification is an important regulator of chromatin structure and function. The acetylation of lysine residues happens frequently in the nucleus of eukaryotic cells where histone acetylases (HATs) facilitate this process. Known alternatively as lysine acetylation it represents an important post-translational modification impacting gene expression regulation.
Biological function summary	Acetylation adds an acetyl group to the lysine which changes its positive charge reducing chromatin compaction and enhancing gene transcription. The acetyl lysine modification is not acting alone; it forms part of larger histone modification complexes. By altering chromatin structure acetyl lysine regulates the accessibility of transcription factors to DNA influencing various biological processes like DNA repair replication and cell cycle progression. The interaction between acetyl lysine and chromatin remodeling complexes plays a significant role in epigenetic regulation.
Pathways	Acetyl lysine is central to epigenetic regulatory pathways significantly impacting gene expression and cellular growth pathways. The acetylation process involves

	histone acetylases (HATs) such as the p300/CBP complex which adds acetyl groups to specific lysines on histones increasing transcriptional activity. Conversely histone deacetylases (HDACs) remove acetyl groups decreasing transcription. The balance of these modifications involves critical pathways such as the TGF-beta signaling pathway and the NF-kB pathway linking acetyl lysine with numerous cellular activities and protein interactions.
Associated diseases and disorders	Dysregulation of acetyl lysine levels is associated with cancer and neurodegenerative diseases. In cancer the aberrant acetylation of lysine impacts expression of oncogenes and tumor suppressor genes contributing to carcinogenesis. Proteins like p53 which relies on acetylation for activation become functionally impaired. Also in neurodegenerative disorders such as Alzheimer's disease histone acetylation imbalances disrupt neuronal function and gene expression. The involvement of the sirtuin family of proteins which act as NAD+-dependent deacetylases connects lysine acetylation to these diseases highlighting its importance in maintaining normal cellular functions and its role in pathological states.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

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Terms & Conditions.

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