# abcam

## Product datasheet

# Anti-Histone H2A.Z antibody [4A4] ab80150

2 Abreviews 1 Image

Overview

Product name Anti-Histone H2A.Z antibody [4A4]

**Description** Rat monoclonal [4A4] to Histone H2A.Z

Host species Rat

Tested applications Suitable for: WB

Unsuitable for: Flow Cyt,ICC/IF or IHC-P

Species reactivity Reacts with: Recombinant fragment

Predicted to work with: Mouse, Rat, Cow, Human, Pig, Xenopus laevis, Zebrafish, Orangutan

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**Immunogen** Synthetic peptide corresponding to Human Histone H2A.Z.

**Positive control** This antibody gave a positive signal when used to probe Histone H2A.Z recombinant protein.

General notes This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or

conjugation for your experiments, please contact **orders@abcam.com**.

The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

**Properties** 

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

**Storage buffer** pH: 7.40

Preservative: 0.02% Sodium azide

Constituent: PBS

PurityIgG fractionClonalityMonoclonal

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Clone number 4A4
Isotype IgG2b

#### **Applications**

#### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab80150 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 17 kDa (predicted molecular weight: 13 kDa).

Application notes

Is unsuitable for Flow Cyt,ICC/IF or IHC-P.

#### **Target**

**Function** 

Variant histone H2A which replaces conventional H2A in a subset of nucleosomes. Nucleosomes wrap and compact DNA into chromatin, limiting DNA accessibility to the cellular machineries which require DNA as a template. Histones thereby play a central role in transcription regulation, DNA repair, DNA replication and chromosomal stability. DNA accessibility is regulated via a complex set of post-translational modifications of histones, also called histone code, and nucleosome remodeling. May be involved in the formation of constitutive heterochromatin. May be required for chromosome segregation during cell division.

Sequence similarities

Belongs to the histone H2A family.

Post-translational modifications

Monoubiquitination of Lys-122 gives a specific tag for epigenetic transcriptional repression. Acetylated on Lys-5, Lys-8 and Lys-12 during interphase. Acetylation disappears at mitosis. Monomethylated on Lys-5 and Lys-8 by SETD6. SETD6 predominantly methylates Lys-8, lys-5

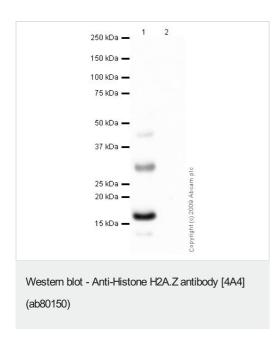
being a possible secondary site.

Not phosphorylated.

**Cellular localization** 

Nucleus. Chromosome.

#### **Images**



All lanes: Anti-Histone H2A.Z antibody [4A4] (ab80150) at 1 µg/ml

**Lane 1**: Histone H2A.Z recombinant protein **Lane 2**: Histone H2A recombinant protein

Lysates/proteins at 0.5 µg per lane.

#### Secondary

All lanes: Goat polyclonal to Rat IgG - H&L - Pre-Adsorbed (HRP)

at 1/10000 dilution

**Predicted band size:** 13 kDa **Observed band size:** 17 kDa

Additional bands at: 30 kDa. We are unsure as to the identity of

these extra bands.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- · Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- · We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.com/abpromise">https://www.abcam.com/abpromise</a> or contact our technical team.

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