Histone 2A ABfinity™ Recombinant Rabbit Monoclonal Antibody - Purified

Catalog no. 700158

(See product label for lot information)

Clone/PAD: 15H4L7
Isotype: IgG
Gene ID: 8331, 8329, 3013, 85235, 3012
Protein Acc. no.: Q99878, P0C0S8, P20671,Q96KK5,P04908
Qty: 100 µg
Volume: 200 µL
Concentration: 0.5 mg/mL

Formulation
Phosphate buffered saline (PBS) with 0.09% sodium azide.

Application
For use in Western Blotting and ELISA.

Reactivity
This antibody is specific for human Histone 2A.

Immunogen
Peptide corresponding to amino acids 2-19 of human Histone 2A.

Immunogen sequence
SGRGKQGGKARAKAKTRS

Sequence Identity
Human

Sequence Homology
Mouse

Expected Reactivity
Based on sequence identity and similarity, reactivity to Human and Mouse are predicted.

Storage
2-8°C for up to 1 month, -20°C for long term storage. Avoid repeated freezing and thawing.

Expiration Date
Expires one year from date of receipt when stored as instructed.

Background
Histones are nuclear proteins that play an important role in maintaining the structure of the chromosome in eukaryotes (1). The nucleosome is made up of around 146bp of DNA, which enfolds around a histone octomer unit comprising of four major histones, H2A, H2B, H3 and H4. An important role of H2A is to ensure proper assembly or functioning of the centrometre (2). They also play an important role in gene regulation. The protein can be modified by acetylation and phosphorylation (3).

References

1) Juan Ausio. 2006. Histone variantsçthe structure behind the function. Briefings in Functional Genomics and Proteomics.228-243.

2) Inés Pinto and Fred Winston. 2000. Histone H2A is required for normal centromere function in Saccharomyces cerevisiae. The EMBO Journal. 1598 - 1612

3) Panagiotis Pantazis and William M. Bonner. 1980. Quantitative Determination of Histone Modification. The Journal of Biological Chemistry. 4669-4675

Applications:

	Species	Test Material	Concentration
Western Blotting	Human	HeLa	0.1 - 2 µg/ml
Indirect ELISA	Human	Recombinant Protein	$4.7x10^{-5}$ - 1 µg/ml

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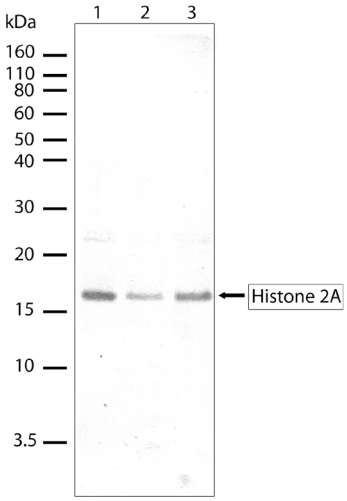
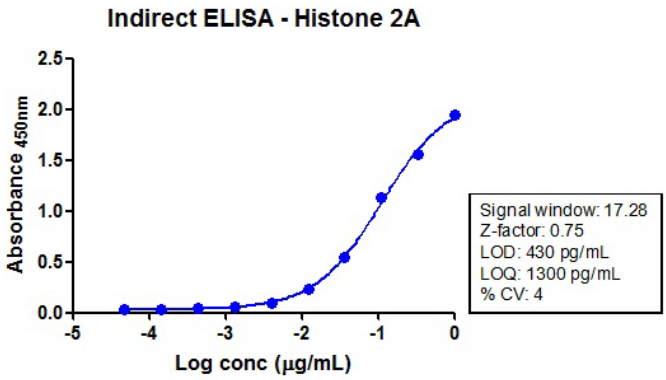


Western Blot of Histone 2A labeled with Histone 2A Rabbit Recombinant Monoclonal Antibody (Cat. No.700158).
Histone 2A Rabbit Recombinant Monoclonal Antibody (1 µg/mL) was used to detect Histone 2A in Lane 1: HeLa Cell Lysate (30µg/lane), Lane 2: NIH/3T3 Cell Lysate (30µg/lane), Lane 3: Cos7 Cell Lysate (30µg/lane), The western was performed using 5% milk in TBST as Blocking agent. GAR-AP (1:10,000) used as Secondary and developed with NBT/BCIP as the substrate.



Indirect ELISA of Histone 2A Rabbit Recombinant Monoclonal Antibody (Cat. No.700158).
Indirect ELISA was done using Histone 2A Rabbit Recombinant Monoclonal Antibody to detect the recombinant protein (100ng/well), using TMB (Cat. No. SB01) as substrate.

Explanation of symbols

Symbol	Description	Symbol	Description
REF	Catalogue Number	LOT	Batch code
RUO	Research Use Only	IVD	*In vitro* diagnostic medical device
	Use by		Temperature limitation
	Manufacturer	EC REP	European Community authorised representative
[-]	Without, does not contain	[+]	With, contains
Protect from Light	Protect from light		Consult accompanying documents
	Directs the user to consult instructions for use (IFU), accompanying the product.		

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