

PRODUCT INFORMATION



Histone H2A (*Xenopus*, recombinant)

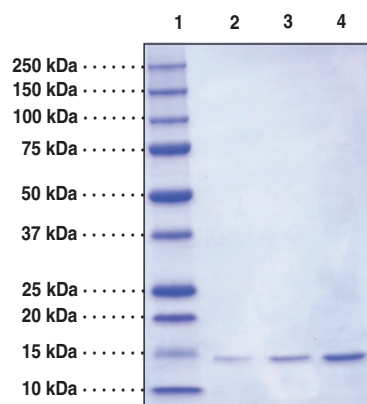
Item No. 10261

Overview and Properties

Source: Recombinant protein expressed in *E. coli*
Amino Acids: 2-130 (full length)
Uniprot No.: P06897
Molecular Weight: 13.9 kDa
Storage: -80°C (as supplied); avoid freeze/thaw cycles by aliquoting protein after resuspension
Stability: ≥1 year
Purity: ≥95% estimated by SDS-PAGE
Supplied as: A lyophilized powder

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Image



Lane 1: MW Markers
Lane 2: H2A (1 µg)
Lane 3: H2A (2 µg)
Lane 4: H2A (5 µg)

Representative gel image shown; actual purity may vary between each batch but protein will be ≥95% pure.

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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Description

A nucleosome is the basic repeating unit of chromatin in which 146 base pairs of DNA wrap twice around an octamer of histones.¹ The octamer is composed of two of each histone H2A, H2B, H3, and H4. Histones H2A and H2B form a dimer. Histones H3 and H4 form a tetramer. The combination of two H2A/H2B dimers and one H3/H4 tetramer create the nucleosome core.² Histone H3 undergoes many modifications which include acetylation, phosphorylation, ubiquitylation, sumoylation, and biotinylation that are important for regulation of gene transcription.¹

References

1. Bhaumik, S.R., Smith, E., and Shilatifard, A. Covalent modifications of histones during development and disease pathogenesis. *Nat. Struct. Mol. Biol.* **14(11)**, 1008-1016 (2007).
2. Tanaka, Y., Tawaramoto-Sasanuma, M., Kawaguchi, S., *et al.* Expression and purification of recombinant human histones. *Methods* **33(1)**, 3-11 (2004).

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