

# PRODUCT INFORMATION



## Histone H4 (human, recombinant)

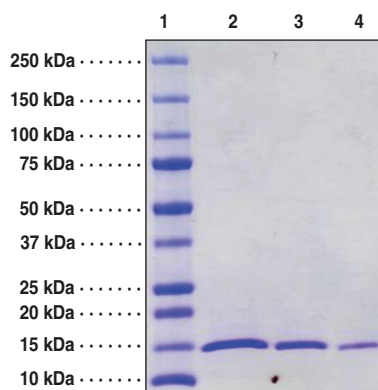
Item No. 10264

### Overview and Properties

**Synonyms:** H4, Histone H4  
**Source:** Recombinant protein, expressed in *E. coli*  
**Amino Acids:** 1-103 (full-length)  
**Uniprot No.:** P62805  
**Molecular Weight:** 11.5 kDa  
**Storage:** -80°C (as supplied); avoid freeze/thaw cycles by aliquoting protein  
**Stability:** ≥1 year  
**Purity:** ≥75% (estimated by SDS-PAGE)  
**Supplied in:** A solution in water (frozen)

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

### Image



Lane 1: MW Markers  
Lane 2: Purified H4 (10 µg)  
Lane 3: Purified H4 (5 µg)  
Lane 4: Purified H4 (2 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

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A nucleosome is the basic repeating unit of chromatin in which 146 base pairs of DNA wrap twice around a histone octamer consisting of two copies of each of the core histones, H2A, H2B, H3, and H4.<sup>1</sup> The combination of two H2A/H2B dimers and one H3/H4 tetramer create the nucleosome core.<sup>2</sup> Histone H4 undergoes many modifications which include acetylation, methylation, and phosphorylation that are important for regulation of gene transcription.<sup>1</sup>

## References

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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**, 3-11 (2004).

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