

## Human recombinant H3.1 core Histones

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**Catalog N° :** EPX-03-RH

**Source :** Human

**Quantity:** 25µg of recombinant core histones at 1µg /µl

**Expressed in:** E. Coli

### Background:

Histones are the core components of the nucleosome (1). The nucleosome is the basic subunit of chromatin and consists of 147 base pairs of DNA wrapped around an octamer of core histones H2A, H2B, H3 and H4 (2).

### Protein details:

Recombinant human core histones produced in E. Coli, purified using FPLC and formulated in a storage buffer containing 20mM Tris-Cl pH 7.9, 1mM EDTA, 2M NaCl, 0.5mM PMSF and 1mM DTT. Protein concentration was determined by spectrometry. >98% purity by SDS-PAGE.

### Quality control:

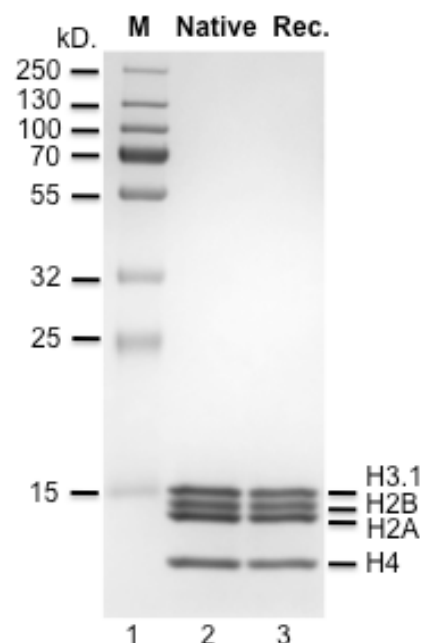
Each lot has been evaluated by ESI-TOF analysis and 14% SDS-PAGE mini-gel (NOVEX Tris-Glycine SDS, Invitrogen).

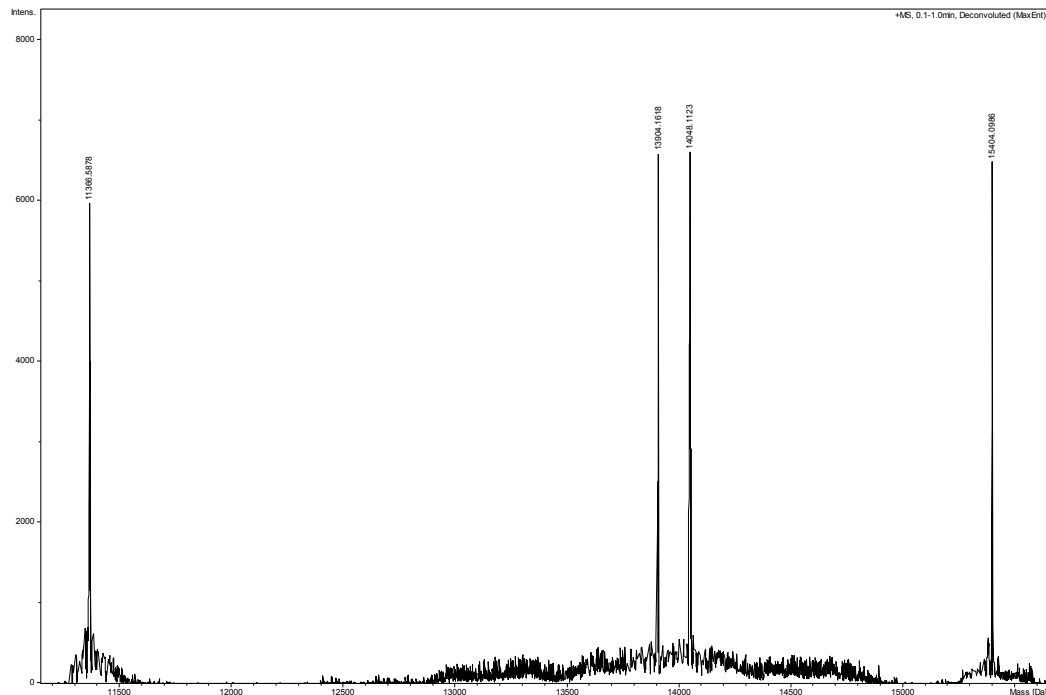
### Storage:

-80°C

### Guarantee:

For research use only. Products guaranteed stable for 2 years from date of receipt when stored properly.





ESI-TOF analysis of recombinant human H3.1 core histones.

## Protein sequences:

### **H2A** (Theoretical Mw: 14091.48)

MSGRGKQGGKARAKAKTRSSRAGLQFPVGRVHRLLRKGNYAERVGAGAPV  
YLAHVLEYLTAEILELAGNAARDNKKTRIIPRHLQLAIRNDEELNKLKLGK  
VTIAQGGVLPNIQAVLLPKKTESHKAKGK

### **H2B** (Theoretical Mw: 13904.17)

MPEPAKSAPAPKKGSKKAVTKAQKKGKKRKRSRKESYSIYVYKVLKQVH

PDTGISSKAMGIMNSFVNDIFERIAGEASRLAHYNKRSTITSREIQTAVR  
LLLPGELAKHAVSEGTKAVTKYTSK

### **H3.1** (Theoretical Mw: 15404.09)

MARTKQTARKSTGGKAPRKQLATKAARKSAPATGGVKKPHRYRPGTVALR  
EIRRYQKSTELLIRKLPFQRLVREIAQDFKTDLRFQSSAVMALQEACEAY  
LVGLFEDTNLCAIHAKRVTIMPKDIQLARRIGERA

### **H4** (Theoretical Mw: 11367.34)

MSGRGKGGKGLGKGGAKRHRKVLRDNIQGITKPAIRRLARRGGVKRISGL  
IYEETRGVLKVFLENVIRDAVTYTEHAKRKTVTAMDVVYALKRQGRTLYG  
FGG

## References:

1. Van Holde, K. E. (1989) Chromatin, 1-497.
2. Luger et al., (1997) Nature, 389(6648):251-60.