

# Histone H3K9me2, synthetic

Catalog number: AH3-1003

25 µg

## Almac Peptide and Protein Technologies

- Chemokines
- Custom Peptides
- Site-Specific protein labelling
- Modified Histones**
- Ubiquitylated peptides

## Background

Histones are globular proteins that are subject to a wide variety of post-translational modifications<sup>1,2</sup>. These histone modifications, which occur predominantly on the unstructured N-terminal tails, form an epigenetic code central in the regulation of regular and disease-specific cellular processes, in particular DNA replication, repair and transcription<sup>3,4</sup>.

Our synthetic modified histones correspond exactly to the sequences of the natural modified Histones, containing no amino acid replacements or residue analogs, and can be used in a variety of applications, such as substrates for specific histone modification enzymes, protein binding assays and the generation of chromatin preparations.

<sup>1</sup> Strahl B *et al.*, 2000, Nature 403, 41; <sup>2</sup> Rando O, 2007, Curr Opin Genet Dev 17, 94; <sup>3</sup> Martin C *et al.*, 2005, Nat Rev Mol Cell Biol 6, 838; <sup>4</sup> Biancotto C *et al.*, 2010, Adv Genet 70, 341

## Product Information

### Sequence:

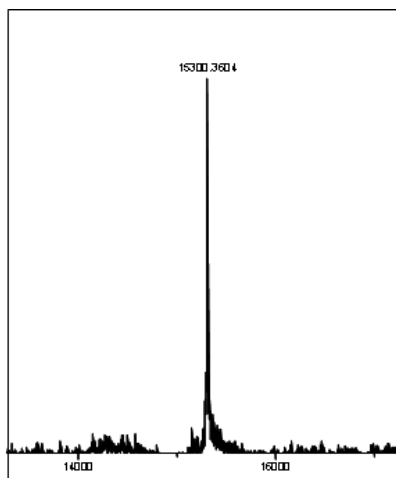
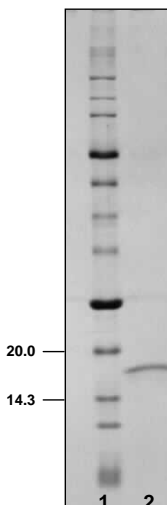
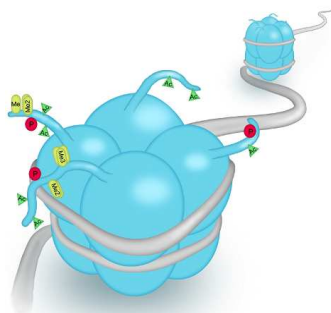
ARTKQTAR**K(Me<sub>2</sub>)**S TGGKAPRKQL ATKAARKSAP  
ATGGVKKPHR YRPGTVALRE IRRYQKSTEL  
LIRKLPFQRL VREIAQDFKT DLRFAQSSAVM  
ALQEACEAYL VGLFEDTNLC AIHAKRVTIM  
PKDIQLARRI RGERA

### Purity:

>95% by Coomassie-stained SDS-PAGE under reducing conditions

### Determined Mass:

15 300.4 Da



Synthetic H3K9me2 analysed by SDS-PAGE (lane 1 MW marker; lane 2 H3K9me2). Product mass determined by ESI-TOF mass spectrometry (expected mass 15 300.9 Da)

### Formulation / Appearance:

White powder, lyophilized.  
Protein content determined by Bradford assay.

## Preparation and Storage

### Reconstitution / Storage:

It is recommended that unopened vials are stored at -20 °C to -70 °C for periods of up to 12 months. Avoid repeat freeze-thaw cycles.

Centrifuge vials prior to opening. Reconstitute in water or a suitable buffer for your assay.

*Not fully tested. For research use only. Not for use in human diagnostic or therapeutic procedures.*