

## Histone H3K9me2, synthetic

**25 µg**

Catalogue number: AH3-1003

### Almac Peptide and Protein Technologies

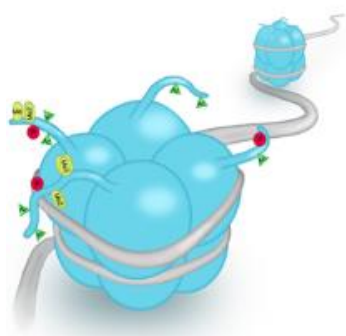
Chemokines

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.

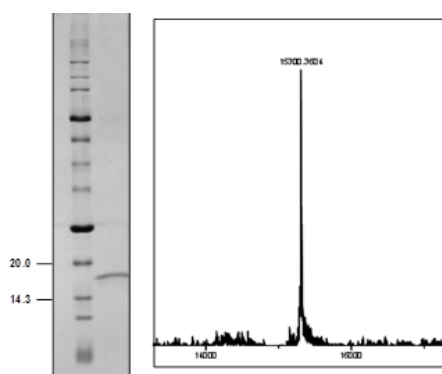
<sup>1</sup> Strahl B et al., 2000, Nature 403, 41; <sup>2</sup> Rando O, 2007, Curr Opin Genet Dev 17, 94; <sup>3</sup> Martin C et al., 2005, Nat Rev Mol Cell Biol 6, 838; <sup>4</sup> Biancotto C et al., 2010, Adv Genet 70, 341

### Product Information

**Sequence:** ARTKQTAR**K(Me2)**S TGGKAPRKQL ATKAARKSAP  
ATGGVKKPHR YRPGTVALRE IRRYQKSTEL LIRKLFPQRL  
VREIAQDFKT DLRFSQSSAVM 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.

Centrifuged 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.*