

Mononucleosomes H3.3 Recombinant Protein | H3.3 recombinant protein

Recombinant Mononucleosomes H3.3 (K4M)

CATALOG #
AAA60228

HOST
E Coli

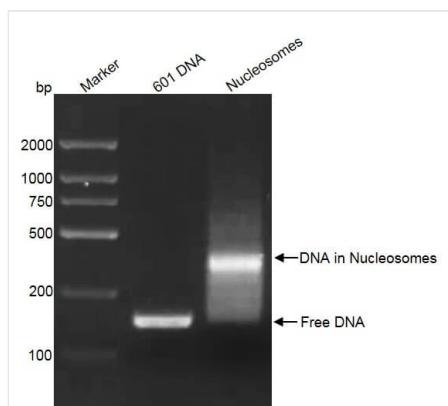
PRODUCT SYNONYMS

Mononucleosomes H3.3; Recombinant Mononucleosomes H3.3 (K4M); H3.3 recombinant protein

PRODUCT SPECIFICATIONS

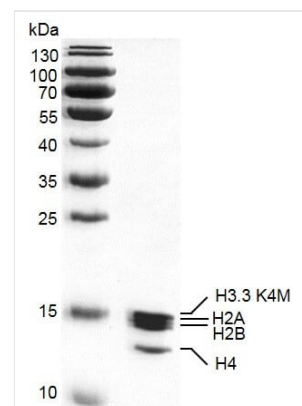
Host	E Coli
Form/Format	Recombinant Mononucleosomes H3.3 (K4M)(20ug protein + 20ug DNA) is supplied in 10mM Tris-HCl pH8.0, 1mM EDTA, 2mM DTT, and 20% glycerol.
Protein Species	Human
Protein Details	Recombinant Mononucleosomes H3.3 (K4M) consist of a 167 bp of 601 DNA and two molecules each of histones H2A that includes amino acids 1-130 (end)(accession number NM_003512), H2B that includes amino acids 1-126 (end)(accession number NM_003518), H3.3 that includes amino acids 1-136 (end)(accession number NM_005324) with a point mutation Lys4Met, and H4 that includes amino acids 1-103 (end)(accession number NM_003548). All of these histones were expressed in E Coli cells.
Notes	This product was manufactured as described in Protein Details. Where possible, We has developed functional or activity assays for recombinant proteins. Additional characterization such as enzyme kinetic activity assays, inhibitor screening or other biological activity assays may not have been performed for every product. All available data for a given product is shown on the lot-specific Technical Data Sheet.
Dry Ice Note	The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.
Preparation and Storage	Recombinant proteins in solution are temperature sensitive and must be stored at -80 degree C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. Shipping Temp: Dry Ice

IMAGES



Application Data

Recombinant Mononucleosomes H3.3 (K4M) DNA gel. Recombinant Mononucleosomes H3.3 (K4M) were run on a 2% agarose gel and stained with ethidium bromide. Lane 1: DNA marker. Lane 2: 601 DNA which was used for assembly of nucleosome. Lane 3: Intact mononucleosomes H3.3 (K4M). Intact mononucleosomes H3.3 (K4M) migrated much higher than free 601 DNA. The agarose gel shows that almost all of 601 DNA wrapped histone octamers to form nucleosomes.



SDS-PAGE

Recombinant Mononucleosomes H3.3 (K4M) 12.5% SDS-PAGE with Coomassie staining. MW:108 kDa Purity: >95%

ADDITIONAL INFORMATION

Related Product Information for H3.3 recombinant protein	Background: Recombinant nucleosomes are widely used in histone methyltransferase screening assays to identify small molecular inhibitors for drug discovery. Histone H3.1 and Histone H3.3 are the two main Histone H3 variants found in plants and animals and are known to be important for gene regulation. Histone H3.1 and H3.3 demonstrate unique genomic localization patterns thought to be associated with their specific functions in regulation of gene activity. Specifically, Histone H3.3 primarily co-localizes with marks associated with gene activation (H3K4me3, H2BK120ub1, and RNA pol II occupancy). Deposition of the Histone H3.1 variant into the nucleosome correlates with the canonical DNA synthesis-dependent deposition pathway, whereas Histone H3.3 primarily serves as the replacement Histone H3 variant outside of S-phase, such as during gene transcription. Histones are linked to tumorigenesis primarily through alterations in their PTMs and the enzymes regulating these modifications, suggesting that they might disrupt the reading, writing, and/or erasing of these marks. Except for being near K9, which can be methylated or acetylated, R8 site itself can be methylated too. Mutations in histone H3 occur with high genetic penetrance within rare gliomas and sarcomas. Researchers have found that histones containing mutations at H3 N-terminal residues at or near PTM sites including R2, R8, K18 and R26 may be considered as oncogenic.
Product Categories/Family for H3.3 recombinant protein	Recombinant Proteins

NCBI AND UNIPROT INFORMATION

NCBI GenBank Nucleotide #	NM_003512
Molecular Weight	Molecular weight of histone octamer is 108kDa

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/mononucleosomes-h3-3-recombinant-protein-e-coli/60228>