Chicken Polynucleosomes, Purified

Catalog No. 16-0004
Lot No. 13282001
Pack Size 50 µg

Product Description:

Polynucleosomes purified from chicken erythrocytes. The nucleosome is the basic subunit of chromatin consisting of the histone octamer (two each of the four core histones, H2A, H2B, H3 and H4) wrapped by 147 base pairs of DNA. As shown by the size of the DNA species, Chicken Polyucleosomes are predominantly hexamers, septamers and octamers.

Formulation:

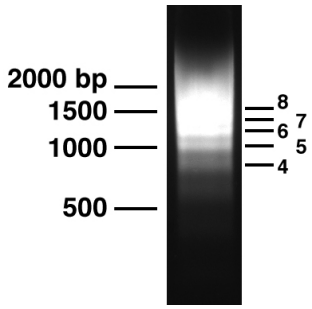
Purified chicken oligonucleosomes at a concentration of 2.5 mg/ml (DNA + protein) in 10 mM Tris-HCl pH 8.0, 1 mM EDTA and 10% glycerol.

Storage and Stability:

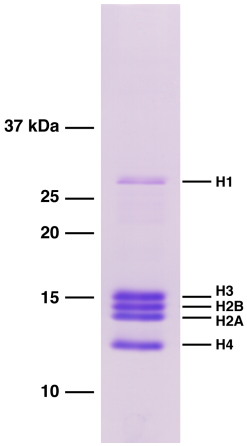
Stable for six months at -80°C from date of receipt. For best results, aliquot and avoid multiple freeze/thaws.

Application Notes:

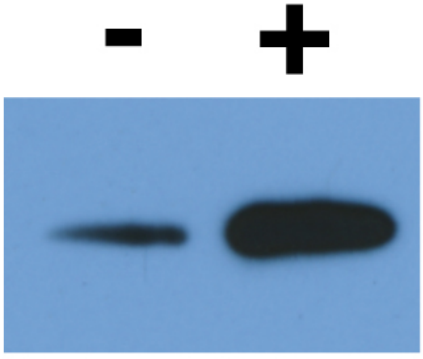
Chicken oligonucleosomes are suitable for use in enzyme assays such as acetylation, methylation or phosphorylation, chromatin binding assays, or for use as a positive control in Western blotting.



DNA Gel Data: DNA was purified from Chicken Polyucleosomes (10 µg) and run on an agarose gel to show the size of nucleosomal DNA compared to molecular weight markers (base pairs). Note that while mononucleosomal DNA runs at 147 base pairs, oligonucleosomal DNA is roughly 200 base pairs per nucleosome.



Protein Gel Data: Coomassie stained PAGE gel of proteins in Chicken Polynucleosomes (10 µg) to demonstrate the purity of the histones in the preparation. Sizes of molecular weight markers (kDa) and positions of the core histones (H2A, H2B, H3 and H4) and histone H1 are indicated.



HMT Assay Data: Western blot performed on Chicken Polynucleosomes (4 µg) that were reacted with (+) or without (-) yeast Dot1 histone methyltransferase. Western blot was developed with an antibody recognizing H3 K79me3, the modification catalyzed by Dot1.

References:

Adhvaryu KK et al (2005). *Eukaryot Cell* 4: 1455-1564.
Kizer KO et al (2005). *Mol Cell Biol* 25: 3305-3316.
Morris SA et al (2005). *Eukaryot Cell* 4: 1446-1454.