Chicken Polynucleosomes, Purified (HSW)

Catalog No.	16-0022
Lot No.	17248001
Pack Size	50 µg

Product Description:

Polynucleosomes purified from chicken erythrocytes using a high salt wash (HSW). 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 trimers, tetramers, and pentamers, and due to the HSW **do not** contain histone H1.

Formulation:

Purified chicken oligonucleosomes at a concentration of 0.72 mg/ml (DNA + protein) in 10 mM Tris-HCl pH 8.0, 1 mM EDTA and 10% glycerol.

Concentration may differ from previous lots.

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.



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.





DNA Gel Data: DNA was purified from Chicken Polynucleosomes (1 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 (2 μg) to demonstrate the purity of the histones in the preparation. Sizes of molecular weight markers and positions of the core histones (H2A, H2B, H3 and H4) are indicated. Histone H1 is not present due to the high salt wash.



Histone Methyltransferase Data: Chicken Polynucleosomes were used in a radioactive histone methyltransferase assay with recombinant G9a. Radioactive SAM was incubated with Chicken Mononucleosmes in the absence (-) or presence (+) of recombinant G9a and run on an acrylamide gel. HMTase activity co-purifying with the nucleosomes is undetectable. **Left Top:** Coomassie stained gel. **Left Bottom:** autoradiogram of gel. **Right:** Densitometry quantification of autoradiogram.

This product is for *in vitro* research use only and is not intended for use in humans or animals.

