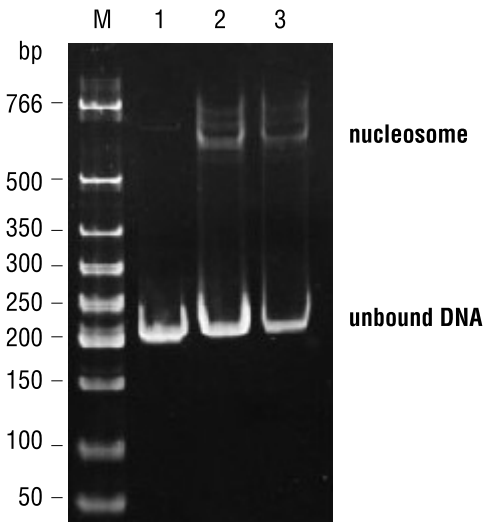


# EpiMark<sup>®</sup> Nucleosome Assembly Kit

- 高純度 Nucleosome 重組系統
- 優化 DNA 及重組蛋白質的比例以提高結合效率，並避免蛋白質過量造成聚合體
- 包含 Histone H2A/H2B Dimer 及 Histone H3.1/H4 Tetramer 重組蛋白質，可穩定保存一年
- 藉由調整鹽濃度，使重組蛋白質形成八聚體並結合 DNA 形成 Nucleosome
- 一個反應約可得到 1  $\mu$ g Nucleosome
- 可應用於 ChIP assay, HAT assay (Histone Acetyltransferase), Enzymatic modification assay (e.g., methylation) 等分析

可利用 gel shift assay 分析 Nucleosome 的組成



	For Optimizing User-supplied DNA Substrate			
	Control DNA only (50 pmol)	0.5 to 1 Octamer to DNA	1 to 1 Octamer to DNA	1.5 to 1 Octamer to DNA
Water	1 $\mu$ l	0 to 4.5 $\mu$ l	0 to 7 $\mu$ l	0 to 1.5 $\mu$ l
5M NaCl	4 $\mu$ l	6 $\mu$ l	4 $\mu$ l	2 $\mu$ l
DNA	5 $\mu$ l (10 $\mu$ M)	50 pmol	50 pmol	50 pmol
20 $\mu$ M Dimer	5 $\mu$ l	2.5 $\mu$ l	5 $\mu$ l	7.5 $\mu$ l
10 $\mu$ M Tetramer	5 $\mu$ l	2.5 $\mu$ l	5 $\mu$ l	7.5 $\mu$ l
<b>Total</b>	<b>20 <math>\mu</math>l</b>	<b>20 <math>\mu</math>l</b>	<b>20 <math>\mu</math>l</b>	<b>20 <math>\mu</math>l</b>

For 50 pmol

	For Optimizing User-supplied DNA Substrate			
	Control DNA only (25 pmol)	0.5 to 1 Octamer to DNA	1 to 1 Octamer to DNA	1.5 to 1 Octamer to DNA
Water	0.5 $\mu$ l	0 to 4.5 $\mu$ l	0 to 7 $\mu$ l	0 to 1.5 $\mu$ l
5M NaCl	2 $\mu$ l	3 $\mu$ l	2 $\mu$ l	1 $\mu$ l
DNA	2.5 $\mu$ l (10 $\mu$ M)	25 pmol	25 pmol	25 pmol
20 $\mu$ M Dimer	2.5 $\mu$ l	1.25 $\mu$ l	2.5 $\mu$ l	3.75 $\mu$ l
10 $\mu$ M Tetramer	2.5 $\mu$ l	1.25 $\mu$ l	2.5 $\mu$ l	3.75 $\mu$ l
<b>Total</b>	<b>10 <math>\mu</math>l</b>	<b>10 <math>\mu</math>l</b>	<b>10 <math>\mu</math>l</b>	<b>10 <math>\mu</math>l</b>

For 25 pmol

- M: Low Molecular Weight DNA Ladder (NEB #N3233)
- Lane 1: Nucleosome Control DNA
- Lane 2: 0.5:1 ratio of Octamer\* to DNA
- Lane 3: 1:1 ratio of Octamer\* to DNA
- \* Octamer = 2:1 mix of Histone H2A/H2B Dimer and Histone H3.1/H4 Tetramer.

Catalog #	Products	Kit Components
E5350S	EpiMark <sup>®</sup> Nucleosome Assembly Kit (20)	Nucleosome Control DNA (10 $\mu$ M) Histone H2A/H2B Dimer Human, Recombinant (20 $\mu$ M) Histone H3.1/H4 Tetramer Human, Recombinant (10 $\mu$ M)