

Lysate Preparation

The nucleosome is a protein complex consisting of four core histones (H2A, H2B, H3, and H4). Two molecules of each histone forms an octamer that makes up the nucleosome. DNA wraps around repeating nucleosome units to generate chromatin structures. The structure of chromatin determines the accessibility to transcription factors. Post-translational modification of the amino-terminal tail of histones in nucleosomes alters chromatin structure to promote or inhibit transcription. Histone H2B activity is regulated through phosphorylation at multiple sites Ser-14, Ser-32, and Ser-36 in the amino-terminal region. AMPK phosphorylates Ser-36 on histone H2B during cell stress leading to increased transcription and cell survival, while ectopic expression of an unphosphorylatable histone H2B during cell stress reduces transcription of AMPK-dependent genes and lowers cell survival.

Human recombinant Histone H2B is a full length protein (15 kDa) expressed in E. Coli. The protein is detected by rabbit polyclonal anti-Histone H2B (C-terminus) (Cat.#HP4291) and anti-Histone H2B (a.a. 33-47) (Cat.#HP4311).

Buffer and Storage

Histone H2B recombinant protein lysate is supplied at a concentration of 10 ng/µl in electrophoresis sample buffer (62.5 mM Tris pH 6.8, 2% SDS, 5% glycerol, 0.003% bromophenol blue, 0.9% β-mercaptoethanol). Store at -20°C. Do not boil or dilute. Stable for 1 year.

Applications

WB 10 µl/lane

End user should determine optimal quantity for their particular applications and experiments.

Related Products

- HK6520 Histone H2B Phospho-Regulation Antibody Sampler Kit
- HP4291 Histone H2B (C-terminus) Rabbit Polyclonal
- HP4311 Histone H2B (a.a. 33-47) Rabbit Polyclonal
- HP4331 Histone H2B (Ser-36), phospho-specific Rabbit Polyclonal
- AK7600 Actin Filament Regulation Immunocytochemistry Kit

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