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# Histone cluster 2 H2BE (m): 293T Lysate: sc-120796

## BACKGROUND

Eukaryotic histones are basic and water soluble nuclear proteins that form hetero-octameric nucleosome particles by wrapping 146 base pairs of DNA in a left-handed super-helical turn sequentially to form chromosomal fiber. Two molecules of each of the four core histones (H2A, H2B, H3 and H4) form the octamer, which is comprised of two H2A-H2B dimers and two H3-H4 dimers, forming two nearly symmetrical halves by tertiary structure. Histones are subject to posttranslational modification by enzymes primarily on their N-terminal tails, but also in their globular domains. Histone cluster 2 H2BE (Histone H2B type 2-E), also known as HIST2H2BE, H2B, H2BQ, H2BFQ, H2BGL105 or GL105, is a 126 amino acid nuclear protein belonging to the Histone H2B family. Functioning as a key component of the nucleosome, Histone cluster 2 H2BE is essential for chromosomal stability, transcriptional regulation and DNA repair and regulation. Histone cluster 2 H2BE has also been implicated in bactericidal activity of amniotic fluid and may assist in assembly of the colonic epithelium's antimicrobial barrier.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: Hist2h2be (mouse) mapping to 3 F2.1.

## STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## PRODUCT

Histone cluster 2 H2BE (m): 293T Lysate represents a lysate of mouse Histone cluster 2 H2BE transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

## APPLICATIONS

Histone cluster 2 H2BE (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Histone cluster 2 H2BE antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

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