



## HEB (h): 293T Lysate: sc-116193

### BACKGROUND

Differentiation of myogenic cells is regulated by multiple positively and negatively acting factors. One well characterized family of helix-loop-helix (HLH) proteins known to play an important role in the regulation of muscle cell development includes Myo D, myogenin, Myf-5 and Myf-6 (also designated MRF-4 or herculin). Myo D transcription factors form heterodimers with products of a more widely expressed family of bHLH genes, the E family, which consists of at least three distinct genes: E2A, IF2 and HEB. Myo D-E heterodimers bind avidly to consensus (CANNTG) E box target sites that are functionally important elements in the upstream regulatory sequences of many muscle-specific terminal differentiation genes. Both homo- and hetero-oligomers of these proteins are able to distinguish very closely related E box proteins and are believed to play important roles in lineage specific gene expression.

### REFERENCES

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4. Wright, W.E., et al. 1989. Myogenin, a factor regulating myogenesis, has a domain homologous to MyoD. *Cell* 56: 607-617.
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8. Aronheim, A., et al. 1993. Cell-specific expression of helix-loop-helix transcription factors encoded by the E2A gene. *Nucleic Acids Res.* 21: 1601-1606.

### CHROMOSOMAL LOCATION

Genetic locus: TCF12 (human) mapping to 15q21.3.

### PRODUCT

HEB (h): 293T Lysate represents a lysate of human HEB transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

### 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.

### APPLICATIONS

HEB (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive HEB 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

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.