

ENCODE Antibody Validation Documentation

Transcription factor: transcription factor 12 (GeneID 6938)

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Transcription factor: TCF12 (GeneID 6938; ~73 kDa)

Antibody: HEB (A-20), Santa Cruz Biotechnology (sc-357)

Rabbit polyclonal, epitope mapping within the C-terminus of HEB of human origin

Web: <http://www.scbt.com/datasheet-357-heb-a-20-antibody.html>

Validation 1: Immunoblot Analysis

For an antibody to meet ENCODE validation standards, a single band of the predicted size, or a band of no less than half the total signal, must be detected in a lane on a Western blot.

a. Vendor immunoblot analysis

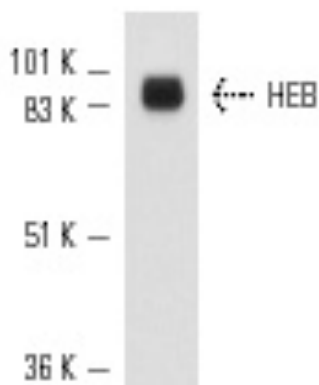


Figure Legend: Western blot analysis of HEB expression in Jurkat nuclear extract.

b. Myers Lab immunoblot analysis

Western blot protocol

Whole cell lysates were immunoprecipitated using primary antibody, and the IP fraction was loaded on a 12% acrylamide gel and separated with a Bio-Rad PROTEAN II xi system. After separation, the samples were transferred to a nitrocellulose membrane using a Bio-Rad Trans-Blot Electrophoretic Transfer system. Standard western blot protocol was used to probe the membrane with the primary antibody (same antibody as used for IP), and an HRP-conjugated secondary antibody and SuperSignal West Femto solution (Thermo Scientific) were used to detect the immunoprecipitated proteins.

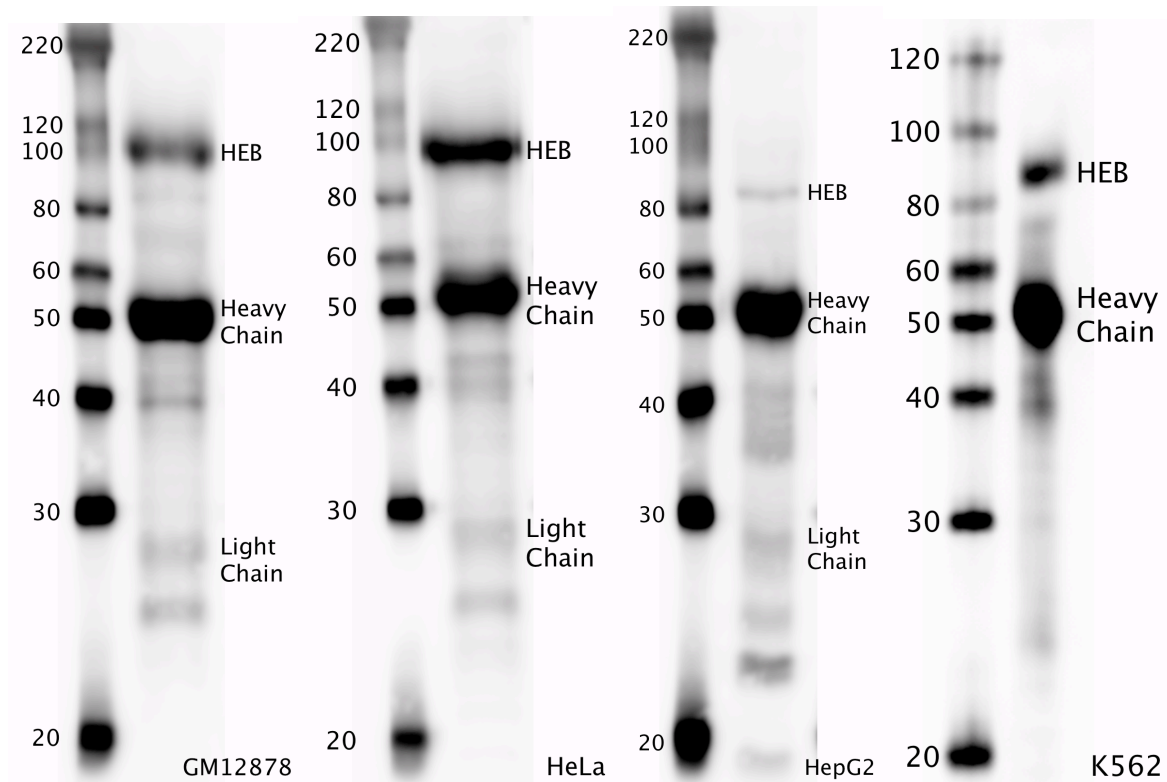


Figure Legend: TCF12 immunoblot: IP-western with sc-357 HEB antibody in whole cell lysates of, from left, GM12878, HeLa, HepG2, and K562. Heavy chain and light chain of IgG are indicated, and TCF12 band is indicated at ~90-100 kDa.

Validation 2: In progress