

Rabbit HEB/TCF12 Polyclonal Antibody | anti-HEB/TCF12 antibody

Anti-HEB/TCF12 Antibody Picoband

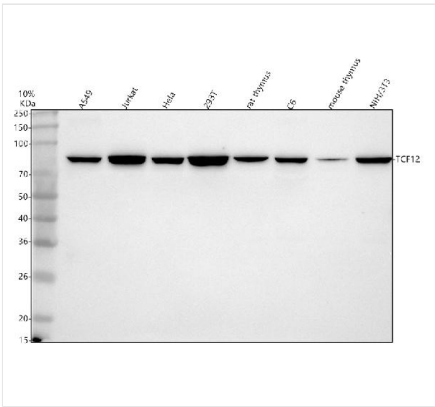
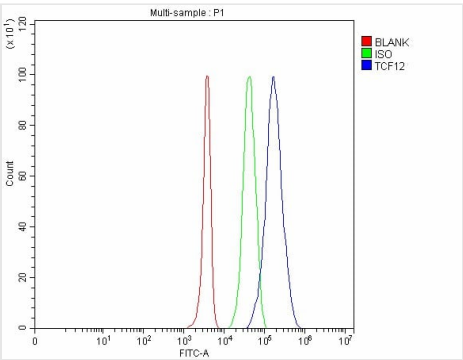
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA127131	Rabbit	Human, Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Western Blot

PRODUCT SYNONYMS

HEB/TCF12; Polyclonal Antibody; Anti-HEB/TCF12 Antibody Picoband; Transcription factor 12; transcription factor 12; TCF12; BHLHB20; HEB; HTF4; TCF-12; Class B basic helix-loop-helix protein 20; bHLHb20; DNA-binding protein HTF4; E-box-binding protein; Transcription factor HTF-4; anti-HEB/TCF12 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Applicable Applications for anti-HEB/TCF12 antibody	ELISA, FCM/FACS (Flow Cytometry), WB (Western Blot)
Immunogen	E coli-derived human HEB/TCF12 recombinant protein (Position: S67-G300). Human TCF12 shares 96.6% amino acid (aa) sequence identity with both mouse and rat TCF12.
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.
Cross Reactivity	No cross-reactivity with other proteins
Preparation and Storage	At -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months.Avoid repeated freezing and thawing.



FCM/FACS (Flow Cytometry)
Figure 2. Flow Cytometry analysis of 293T cells using anti-HEB/TCF12 antibody (AAA127131). Overlay histogram showing 293T cells stained with AAA127131 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-HEB/TCF12 Antibody (AAA127131, 1ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

WB (Western Blot)
Figure 1. Western blot analysis of HEB/TCF12 using anti-HEB/TCF12 antibody (AAA127131). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel)/90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human A549 whole cell lysates, Lane 2: human Jurkat whole cell lysates, Lane 3: human Hela whole cell lysates, Lane 4: human 293T whole cell lysates, Lane 5: rat thymus tissue lysates, Lane 6: rat C6 whole cell lysates, Lane 7: mouse thymus tissue lysates, Lane 8: mouse NIH/3T3 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-HEB/TCF12 antigen affinity purified polyclonal antibody (#AAA127131) at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for HEB/TCF12 at approximately 85 kDa. The expected band size for HEB/TCF12 is at 73 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-HEB/TCF12 antibody	The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Product Categories/Family for anti-HEB/TCF12 antibody	Primary Antibodies
References	1. Davis, E. E., Balasubramanian, R., Kupchinsky, Z. A., Keefe, D. L., Jr., Plummer, L., Khan, K., Meczekalski, B., Heath, K. E., Lopez-Gonzalez, V., Ballesta-Martinez, M. J., Margabanthu, G., Price, S., and 12 others. TCF12 haploinsufficiency causes autosomal dominant Kallmann syndrome and reveals network-level interactions between causal loci. Hum. Molec. Genet. 29: 2435-2450, 2020.2. Doyle, K., Zhang, Y., Baer, R., Bina, M. Distinguishable patterns of protein-DNA interactions involving complexes of basic helix-loop-helix proteins. J. Biol. Chem. 269: 12099-12105, 1994.3. Gan, T.-I., Rowen, L., Nesbitt, R., Roe, B. A., Wu, H., Hu, P., Yao, Z., Kim, U.-J., O'Sickey, T., Bina, M. Genomic organization of human TCF12 gene and spliced mRNA variants producing isoforms of transcription factor HTF4. Cytogenet. Genome Res. 98: 245-248, 2002.

NCBI AND UNIPROT INFORMATION

NCBI GI #	1708332
NCBI GeneID	6938
UniProt Accession #	Q99081; Q7Z3D9; Q86TC1; Q86VM2
Molecular Weight	682
NCBI Official Full Name	Transcription factor 12
NCBI Official Synonym Full Names	transcription factor 12
NCBI Official Symbol	TCF12

NCBI Official Synonym Symbols	HEB; CRS3; HTF4; bHLHb20; HsT17266
NCBI Protein Information	transcription factor 12; TCF-12; E-box-binding protein; DNA-binding protein HTF4; transcription factor HTF-4; helix-loop-helix transcription factor 4; class B basic helix-loop-helix protein 20
UniProt Protein Name	Transcription factor 12
UniProt Gene Name	TCF12
UniProt Synonym Gene Names	BHLHB20; HEB; HTF4; TCF-12; bHLHb20
UniProt Entry Name	HTF4_HUMAN

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/heb-tcf12-antibody-flow-cytometry-western-blot-elisa/127131>