

VpreB3 (E-12): sc-65201

BACKGROUND

VpreB (also known as CD179a or pre-B lymphocyte 1) is expressed in pre-B lymphocytes, but not in mature B cells or in other blood cell lineages. The gene which encodes VpreB maps to human chromosome 22q11.2. The VpreB and Lambda 5 genes encode the ι and ω polypeptide chains, respectively, which associate with the Ig- μ chain to form a molecular complex that is expressed on the surface of pre-B cells. This complex presumably regulates Ig gene rearrangements in the early steps of B cell differentiation. In the mouse the two genes are simultaneously expressed in pre-B cells and belong to the same transcription unit. A primary transcript is synthesized from which the pre-B and Lambda 5 mRNAs are derived by alternative splicing. In the human, however, the two genes are separate and do not belong to the same transcription unit.

REFERENCES

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4. Mattei, M.G., et al. 1991. The human pre-B-specific Lambda-like cluster is located in the 22q11.2-22q12.3 region, distal to the IgC-Lambda locus. *Genomics* 9: 544-546.
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6. Stephan, R.P., et al. 2001. Analysis of VpreB expression during B lineage differentiation in Lambda 5-deficient mice. *J. Immunol.* 167: 3734-3739.
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CHROMOSOMAL LOCATION

Genetic locus: VpreB3 (mouse) mapping to 10 C1.

SOURCE

VpreB3 (E-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of VpreB3 of mouse origin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-65201 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

VpreB3 (E-12) is recommended for detection of VpreB3 of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for VpreB3 siRNA (m): sc-63215, VpreB3 shRNA Plasmid (m): sc-63215-SH and VpreB3 shRNA (m) Lentiviral Particles: sc-63215-V.

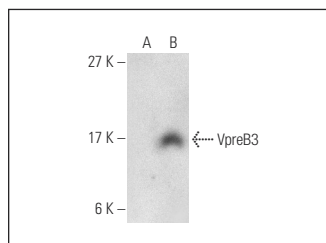
Molecular Weight of VpreB3: 16 kDa.

Positive Controls: VpreB3 (h2): 293T Lysate: sc-158090.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



VpreB3 (E-12): sc-65201. Western blot analysis of VpreB3 expression in non-transfected: sc-117752 (A) and human VpreB3 transfected: sc-158090 (B) 293T whole cell lysates.

RESEARCH USE

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