**BACKGROUND**

The development and differentiation of plasma cells, which are terminally differentiated B cells, are induced by Blimp-1 (B lymphocyte-induced maturation protein, also designated PRDI-BF1). Blimp-1 is a transcriptional repressor that localizes to the nucleus and is considered a master regulator of terminal B cell development. Alone, Blimp-1 is sufficient to trigger terminal B cell differentiation. Blimp-1 upregulates the expression of syndecan-1 and J chain, represses IFN-γ gene transcription and associates with HDAC to recruit it to DNA, thereby repressing c-Myc. Blimp-1 is expressed during the latest stages of B cell differentiation in immunoglobulin-secreting plasma cells, as well as in long-lived, bone marrow plasma cells. The expression of Blimp-1 defines a checkpoint beyond which fully activated B cells proceed to the plasma cell stage, whereas immature and partially activated cells are eliminated.

**CHROMOSOMAL LOCATION**

Genetic locus: PRDM1 (human) mapping to 6q21; Prdm1 (mouse) mapping to 10 B2.

**SOURCE**

Blimp-1 (6D3) is a rat monoclonal antibody raised against a GST-fusion protein corresponding to amino acids 255-395 of Blimp-1 of mouse origin.

**PRODUCT**

Each vial contains 200 µg IgG2a in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift DNA, thereby repressing c-Myc. Blimp-1 is expressed during the latest stages of B cell differentiation in immunoglobulin-secreting plasma cells, as well as in long-lived, bone marrow plasma cells. The expression of Blimp-1 defines a checkpoint beyond which fully activated B cells proceed to the plasma cell stage, whereas immature and partially activated cells are eliminated.

**APPLICATIONS**

Blimp-1 (6D3) is recommended for detection of Blimp-1 of mouse and, to a lesser extent, human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for Blimp-1 siRNA (h): sc-37714, Blimp-1 siRNA (m): sc-37715, Blimp-1 shRNA Plasmid (h): sc-37714-SH, Blimp-1 shRNA Plasmid (m): sc-37715-SH, Blimp-1 shRNA (h) Lentiviral Particles: sc-37714-V, Blimp-1 shRNA (m) Lentiviral Particles: sc-37715-V.

Blimp-1 (6D3) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Blimp-1: 90 kDa.

Positive Controls: SP2/0 whole cell lysate: sc-364795 or F9 cell lysate: sc-2245.

**STORAGE**

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

**DATA**

| Blimp-1 (6D3) : sc-47732. Western blot analysis of Blimp-1 expression in BJAB (A), Raji (B), F9 (C) and SP2/0 (D) whole cell lysates. |
| Blimp-1 (6D3) : sc-47732. Immunoperoxidase staining of human tonsil showing Blimp-1 positive cells in the germinal center. Kindly provided by Dr. L Corcoran of the The Walter and Eliza Hall Institute and Dr. T. Marafioti of Oxford University. |

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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