

## Anti-Human/Mouse PU.1 Purified

**Catalog Number:** 14-9819

**RUO: For Research Use Only. Not for use in diagnostic procedures.**

### Product Information



**Contents:** Anti-Human/Mouse PU.1 Purified

**Catalog Number:** 14-9819

**Clone:** phpu13

**Concentration:** 0.5 mg/mL

**Host/Isotype:** Mouse IgG1, kappa



**LOT**



**Formulation:** aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer

**Temperature Limitation:** Store at 2-8°C.

**Batch Code:** Refer to vial

**Use By:** Refer to vial

**Contains sodium azide**

### Description

The monoclonal phpu13 recognizes human and mouse PU.1, a member of the ets family of transcription factors. This 42 kDa protein was originally identified as Spi-1, a proto-oncogene, for its role in Friend virus-induced murine erythroleukemia. Expression of PU.1 plays a critical role in lymphocyte and myeloid development. Knock-out mice are neonatal lethal and lack myeloid, T and B cells. In addition erythroid development is also altered. Protein expression levels help guarantee proper development; higher levels in myeloid cells compared to lymphocytes. PU.1 controls transcription of several proteins including CD11b, CD18, Gata2, IRF4, CD20, CD10, and CD79.

Disruption of PU.1 expression may play a role in several specific leukemias; such as B-chronic lymphocytic leukemia, mantle cell lymphoma, follicular lymphoma, marginal zone lymphoma, Burkitt lymphoma, diffuse large cell lymphoma, diffuse large B-cell lymphoma, T-cell rich B-cell lymphoma, and nodular lymphocyte predominant Hodgkin.

### Applications Reported

This phpu13 antibody has been reported for use in immunohistochemical staining of formalin-fixed paraffin embedded tissue sections and immunocytochemistry.

### Applications Tested

This phpu13 antibody has been tested by immunohistochemistry on formalin-fixed paraffin embedded tissue using IHC Antigen Retrieval Solution – Low pH (10X) (cat. 00-4955). This can be used at less than or equal to 10 ug/mL. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

### References

Burda P, Laslo P, Stopka T. The role of PU.1 and GATA-1 transcription factors during normal and leukemogenic hematopoiesis. *Leukemia*. 2010 Jul;24(7):1249-57

Ramírez J, Lukin K, Hagman J. From hematopoietic progenitors to B cells: mechanisms of lineage restriction and commitment. *Curr Opin Immunol*. 2010 Apr;22(2):177-84

Anderson KL, Smith KA, Conners K, McKercher SR, Maki RA, Torbett BE Myeloid development is selectively disrupted in PU.1 null mice. *Blood*. 1998 May 15;91(10):3702-10

Klemsz MJ, McKercher SR, Celada A, Van Beveren C, Maki RA The macrophage and B cell-specific transcription factor PU.1 is related to the ets oncogene. *Cell*. 1990 Apr 6;61(1):113-24.

### Related Products

00-4953 IHC /ICC Blocking Buffer - Low Protein

00-4954 20X TBS Wash Buffer for IHC/ICC

00-4955 IHC Antigen Retrieval Solution – Low pH (10X)

14-4714 Mouse IgG1 K Isotype Control Purified (P3.6.2.8.1)

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[info@ebioscience.com](mailto:info@ebioscience.com)