



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

PEBP2 β (h3): 293T Lysate: sc-172714

BACKGROUND

The transcription factor polyomavirus enhancer binding protein 2 (PEBP2), also designated Osf2 (osteoblast-specific transcription factor), CBF α 1 (core binding factor) and AML3 (acute myeloid leukemia), is composed of two subunits, α and β , which are essential for the regulation of hematopoiesis and osteogenesis. The PEBP2 α subunits, PEBP2 α A, PEBP2 α B and PEBP2 α C, are encoded by three RUNX genes, all of which contain a 128 amino acid region homologous to the highly conserved *Drosophila* segmentation gene, runt. This region is involved in DNA binding and heterodimerization with the regulatory β subunit, which facilitates DNA binding of the α subunit. Both subunits are required for *in vivo* function; the disruption of either gene results in a lack of definitive hematopoiesis followed by embryo death in utero due to hemorrhage in the central nervous system. The gene encoding PEBP2 β is the target of chromosomal inversion 16 (p13;q22) with the smooth muscle myosin heavy chain, producing a chimeric gene, PEBP2 β /CBF β -SMMHC, that is associated with human acute myeloid leukemia.

REFERENCES

1. Kamachi, Y., Ogawa, E., Asano, M., Ishida, S., Murakami, Y., Satake, M., Ito, Y. and Shigesada, K. 1990. Purification of a mouse nuclear factor that binds to both the A and B cores of the polyomavirus enhancer. *J. Virol.* 64: 4808-4819.
2. Ogawa, E., Maruyama, M., Kagoshima, H., Inuzuka, M., Lu, J., Satake, M., Shigesada, K. and Ito, Y. 1993. PEBP2/PEA2 represents a family of transcription factors homologous to the products of the *Drosophila* runt gene and the human AML1 gene. *Proc. Natl. Acad. Sci. USA* 90: 6859-6863.
3. Ogawa, E., Inuzuka, M., Maruyama, M., Satake, M., Naito-Fujimoto, M., Ito, Y. and Shigesada, K. 1993. Molecular cloning and characterization of PEBP2 β , the heterodimeric partner of a novel *Drosophila* runt-related DNA binding protein PEBP2 α . *Virology* 194: 314-331.
4. Tanaka, Y., Fujii, M., Hayashi, K., Chiba, N., Akaishi, T., Shineha, R., Nishihira, T., Satomi, S., Ito, Y., Watanabe, T. and Satake, M. 1998. The chimeric protein, PEBP2 β /CBF β -SMMHC, disorganizes cytoplasmic stress fibers and inhibits transcriptional activation. *Oncogene* 17: 699-708.

CHROMOSOMAL LOCATION

Genetic locus: CFBF (human) mapping to 16q22.1.

PRODUCT

PEBP2 β (h3): 293T Lysate represents a lysate of human PEBP2 β transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

STORAGE

Store at -20 $^{\circ}$ C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

APPLICATIONS

PEBP2 β (h3): 293T Lysate is suitable as a Western Blotting positive control for human reactive PEBP2 β antibodies. Recommended use: 10-20 μ l per lane.

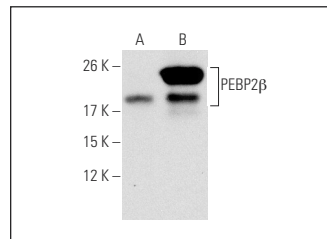
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

PEBP2 β (A-4): sc-166142 is recommended as a positive control antibody for Western Blot analysis of enhanced human PEBP2 β expression in PEBP2 β transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

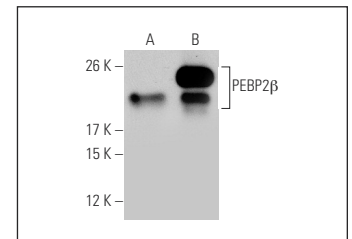
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



PEBP2 β (A-4): sc-166142. Western blot analysis of PEBP2 β expression in non-transfected: sc-117752 (A) and human PEBP2 β transfected: sc-172714 (B) 293T whole cell lysates.



PEBP2 β (H-10): sc-166126. Western blot analysis of PEBP2 β expression in non-transfected: sc-117752 (A) and human PEBP2 β transfected: sc-172714 (B) 293T whole cell lysates.

RESEARCH USE

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