

DESCRIPTION

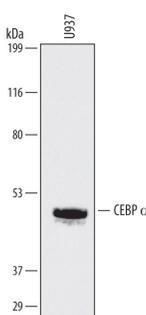
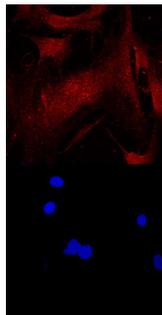
Species Reactivity	Human
Specificity	Detects human CEBP α in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human CEBP beta, gamma, delta, epsilon, or zeta is observed.
Source	Monoclonal Mouse IgG _{2B} Clone # 692716
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human CEBP α Met1-Ala124 Accession # P49715
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μ m filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	1 μ g/mL	See Below
Immunocytochemistry	8-25 μ g/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human CEBP α by Western Blot. Western blot shows lysates of U937 human histiocytic lymphoma cell line. PVDF membrane was probed with 1 μg/mL of Mouse Anti-Human CEBP α Monoclonal Antibody (Catalog # MAB7094) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for CEBP α at approximately 42 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunocytochemistry</p>  <p>CEBP α in Human Mesenchymal Stem Cells. CEBP α was detected in immersion fixed human mesenchymal stem cells using Mouse Anti-Human CEBP α Monoclonal Antibody (Catalog # MAB7094) at 10 μg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red, upper panel; Catalog # NL007) and counterstained with DAPI (blue, lower panel). Specific staining was localized to cytoplasm and nuclei. View our protocol for Fluorescent ICC Staining of Cells on Coverslips.</p>
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PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

CCAAT-enhancer binding protein alpha (CEBP α) is a widely expressed 42 kDa basic-leucine zipper transcription factor that forms functional homodimers and heterodimers with CEBP β and CEBP γ . CEBP α inhibits mitotic progression through multiple mechanisms and also promotes terminal differentiation of granulocytes and adipocytes. Its activity is regulated by SUMOylation and by phosphorylation at multiple serine residues. CEBP α contains three TE transactivation domains (aa 1-69, aa 70-96, and aa 126-200) and one basic DNA binding motif and leucine zipper (aa 286 - 345). A 30 kDa isoform is generated by the use of an internal translation initiation site. The p30 isoform functions as a dominant negative factor by heterodimerizing with and inhibiting full length CEBP α activity. Within aa 1-124, human CEBP α shares 93% amino acid sequence identity with mouse and rat CEBP α , respectively.