

DESCRIPTION	
Species Reactivity	Human
Specificity	Detects human IκB-α in Western blots.
Source	Monoclonal Mouse IgG ₁ Clone # 417208
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human IκB-α Met1-Leu317 Accession # P25963
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μm filtered solution in PBS.

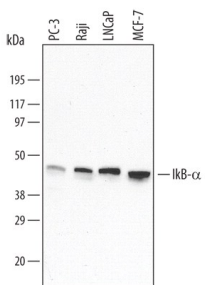
APPLICATIONS

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	0.1 μg/mL	See Below
Immunohistochemistry	5-25 μg/mL	See Below
Simple Western	1 μg/mL	See Below

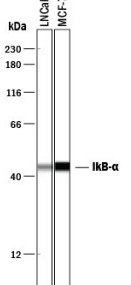
DATA

Western Blot




Detection of Human IκB-α by Western Blot. Western blot shows lysates of Raji human Burkitt's lymphoma cell line, MCF-7 human breast cancer cell line, PC-3 human prostate cancer cell line, and LNCaP human prostate cancer cell line. PVDF membrane was probed with 0.1 μg/mL of Mouse Anti-Human IκB-α Monoclonal Antibody (Catalog # MAB4299) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for IκB-α at approximately 44 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 4.

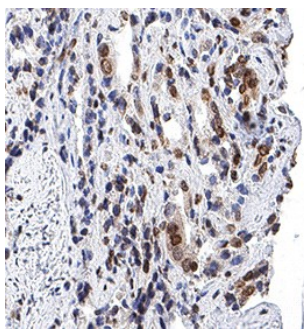
Simple Western



Detection of Human IκB-α by Simple Western™. Simple Western lane view shows lysates of LNCaP human prostate cancer cell line and MCF-7 human breast cancer cell line, loaded at 0.5 mg/mL. A specific band was detected for IκB-α at approximately 44 kDa (as indicated) using 1 μg/mL of Mouse Anti-Human IκB-α Monoclonal Antibody (Catalog # MAB4299). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



Immunohistochemistry



IκB-α in Human Prostate Cancer Tissue. IκB-α was detected in immersion fixed paraffin-embedded sections of human prostate cancer tissue using Mouse Anti-Human IκB-α Monoclonal Antibody (Catalog # MAB4299) at 5 μg/mL for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUcYTE™ HRP Polymer Antibody (Catalog # VC001). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to cytoplasm and nuclei in cancer cells. View our protocol for IHC Staining with VisUcYTE HRP Polymer Detection Reagents.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
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

NF κ B inhibitor alpha (I κ B- α) inhibits the NF κ B complex by binding and sequestering it in the cytoplasm. Upon stimulation, I κ B- α is phosphorylated on serine residues marking it for degradation by the ubiquitin pathway. Following I κ B- α degradation, the NF κ B complex is able to translocate to the nucleus and activate transcription.