

Human BAK Antibody

Monoclonal Mouse IgG₁ Clone # 564305 Catalog Number: MAB8161

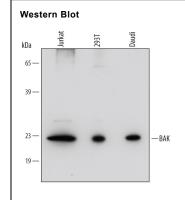
DESCRIPTION	
Species Reactivity	Human
Specificity	Detects endogenous human BAK in Western blots.
Source	Monoclonal Mouse IgG ₁ Clone # 564305
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	E. coli-derived recombinant human BAK Pro20-Asn124 Accession # Q16611
Formulation	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	1 μg/mL	See Below

DATA



Detection of Human BAK by Western Blot. Western blot shows lysates of Jurkat human acute T cell leukemia cell line, 293T human embryonic kidney epithelial cell line, and Daudi human Burkitt's lymphoma cell line. PVDF membrane was probed with 1 µg/mL of Human BAK Monoclonal Antibody (Catalog # MAB8161) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for BAK at approximately 23 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 2.

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.

- 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

BAK (<u>B</u>cl-2 homologous <u>a</u>ntagonist/<u>k</u>iller; also know as BAK1 and Bcl-2-like protein 7) is a 25-30 kDa member of the BCL-2 family of proteins. It is widely expressed and participates in the apoptotic cycle. BAK is an outer mitochondrial membrane protein that is inactive as a Zn-dependent homodimer. Upon activation by p53 or tBID, BAK oligomerizes, creating a pore in the mitochondrial membrane and allowing for cytochrome C release. Human BAK contains three Bcl-2 homology domains (aa 74-88, 117-136 and 169-184), a Zn-binding region (aa 160-166) and a C-terminal transmembrane segment (aa 188-205). Amino acids 67-94 mediate oligomerization of BAK. There are two potential isoform variants; one shows an alternate start site at Met 96, while a second shows a deletion of aa 46-66. Over amino acids 20-124, human BAK shares 76% aa identity with mouse BAK.

