

20-1019: Polyclonal antibody to BAK

Clonality :	Polyclonal
Application :	IP,IHC,WB
Reactivity :	Mouse,Human
Gene :	BAK1
Gene ID :	578
Uniprot ID :	Q16611
Format :	Sera
Alternative Name :	BAK1,BAK,BCL2L7,CDN1
Isotype :	Rabbit IgG
Immunogen Information :	A synthetic peptide of BAK protein (amino acids 16-36 EPALPSASEEQVAQDTEEVFR) was used as the immunogen for this antibody

Description

Human BAK is a 211 amino acid protein. The Bcl-2 family of apoptosis-related genes plays central roles in regulating apoptotic pathways . Bcl-2 family proteins can be divided into 3 main subfamilies on the basis of their function and the content of their Bcl-2 homology (BH) domains, for example: 1) Prosurvival: Bcl-2, Bcl-XL, Bcl-W, A1, and Mcl-1 2) Proapoptotic (multidomain): Bax, Bak, and Bok. 3) BH3-only (proapoptotic): Bad, Bcl-XS, Bid, Bik, Bim, Blk, Bmf, Bnip, Noxa, and Puma. Regulation of cell death through apoptosis is critical for the maintenance of homeostasis, defense against infectious agents, and normal development. Bcl-2 family proteins regulate apoptosis primarily through the regulation of mitochondrial outer membrane permeability. In mammals, the family consists of both prosurvival (antiapoptotic) and proapoptotic (prodeath) members. Cellular homeostasis is thought to be dependent on a balance between the actions of prosurvival and proapoptotic proteins. Many Bcl-2 family proteins are differentially expressed in various malignancies and some are useful prognostic biomarkers. Prosurvival proteins are often elevated in diverse cancers and have the potential to confer resistance to both endogenous cell death stimuli and cancer treatments. Alterations in the ratio or levels of Bcl-2 family proteins have been also associated with nonmalignant diseases including neurodegenerative diseases, autoimmune diseases, AIDs, Downs syndrome, cardiovascular diseases, diabetes, glomerulonephritis, and muscular dystrophy.

Product Info

Amount :	50 µl
Content :	50 µl sera
Storage condition :	Store the antibody at 4°C, stable for 6 months. For long-term storage, store at -20°C. Avoid repeated freeze and thaw cycles.

Application Note

WB: 1:1000-1:2000, IHC (paraffin): 1:1000-1:5000, IHC (frozen): Users should optimize, IP: 1:50-1:200

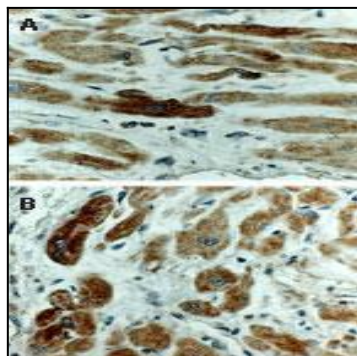


Fig:1 Formalin-fixed paraffin-embedded tissue sections of human heart with cardiomyopathy stained for Bak expression using 20-1019 at 1:2000 (A and B). Hematoxylin-eosin counterstain.

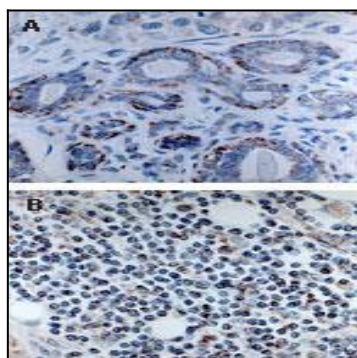


Fig:2 Formalin-fixed paraffin-embedded human tissue for Bak expression using 20-1019 at 1:2000. A. Ductal breast carcinoma. B. Lymphocyte infiltration in soft tissue adjacent to colon carcinoma. Hematoxylin-eosin counterstain.