DB043: PUMA (I17)

Background:

The Bcl-2 family proteins can function to either suppress or promote cell death and are characterized by the presence of up to four conserved amino acid motifs, termed Bcl-2 homology (BH) domains (1). The BH3 function has been further revealed by an emerging group of BH3-only proteins, that includes Bik, Bad, Bid, Bim, Noxa, and the newest member PUMA or bbc3 (1&2). The PUMA gene is a target of p53 transcriptional activation and encodes two BH3 domain-containing proteins (PUMA-alpha and PUMA-beta) (3&4). The activities of PUMA-alpha and PUMA-beta are similar; they bind to Bcl-2, localize to the mitochondria to induce cytochrome c release, and activate extremely rapid apoptosis (3&4).

Origin:

PUMA (I17) is provided as an affinity purified rabbit polyclonal antibody, raised against a peptide mapping to an internal domain of human PUMA.

Product Details:

Each vial contains 200 µg/ml of affinity purified rabbit IgG PUMA (I17) DB043, in 1 ml PBS containing 0.1 % sodium azide and 0.2% gelatin.

Competition Studies:

A blocking peptide is also available, *DB043P*, for use in competition studies. Each vial contains 100 µg of peptide in 0.5 ml PBS with 0.1% sodium azide and 100 µg BSA.

Specificity:

PUMA (I17) DB043 reacts with PUMA of mouse, rat, and human origin by western blotting. Western blotting starting dilution 1:200.
IP and IHC not yet tested

Storage:

Store this product at 4º C, do not freeze. The product is stable for one year from the date of shipment.

References:

1. Han J., Flemington C., Houghton A.B., Gu Z., Zambetti G.P., Lutz R.J., Zhu L., Chittenden T. 2001. Expression of bbc3, a pro-apoptotic BH3-only gene, is regulated by diverse cell death and survival signals. PNAS 98(20):11318-11323.
2. Schuler M., Green D.R. 2001. Mechanisms of p53-dependent apoptosis. Biochem Soc Trans 29(Pt6):684-688.
3. Nakano K., Vousden K.H. 2001. PUMA, a novel proapoptotic gene, is induced by p53. Mol Cell 7(3):683-694.
4. Yu J., Zhang L., Hwang P.M., Kinzler K.W., Vogelstein B. 2001. PUMA induces the rapid apoptosis of colorectal cancer cells. Mol Cell 7(3):673-682.