

BMP2K (h): 293T Lysate: sc-172560

BACKGROUND

The phosphorylation and dephosphorylation of proteins on serine and threonine residues is an essential means of regulating a broad range of cellular functions in eukaryotes, including cell division, homeostasis and apoptosis. A group of proteins that are intimately involved in this process are the serine/threonine (Ser/Thr) protein kinases. BMP2K (BMP2 inducible kinase), also known as BIKE, is a 1,161 amino acid nuclear protein that contains one protein kinase domain and belongs to the Ser/Thr protein kinase family. Thought to be involved in osteoblast differentiation, BMP2K catalyzes the ATP-dependent phosphorylation of bone morphogenic proteins (BMPs); proteins that are essential for proper cartilage and bone formation. Via its catalytic activity, BMP2K may play a role in signaling pathways that mediate bone growth and cellular differentiation. Three isoforms of BMP2K exist due to alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: BMP2K (human) mapping to 4q21.21.

PRODUCT

BMP2K (h): 293T Lysate represents a lysate of human BMP2K transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

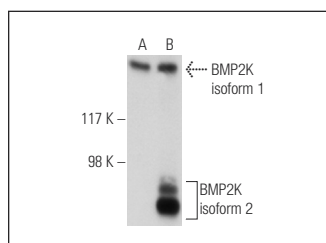
APPLICATIONS

BMP2K (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive BMP2K antibodies. Recommended use: 10-20 μ l per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

BMP2K (NQ-C10): sc-134284 is recommended as a positive control antibody for Western Blot analysis of enhanced human BMP2K expression in BMP2K transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

DATA



BMP2K (NQ-C10): sc-134284. Western blot analysis of BMP2K expression in non-transfected: sc-117752 (A) and human BMP2K transfected: sc-172560 (B) 293T whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.