SANTA CRUZ BIOTECHNOLOGY, INC.

Bek (C-17): sc-122

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Acidic and basic fibroblast growth factors (FGFs) are members of a family of multifunctional polypeptide growth factors that stimulate proliferation of cells of mesenchymal, epithelial and neuroectodermal origin. Like other growth factors, FGFs act by binding and activating specific cell surface receptors. These include the Flg receptor or FGFR-1, the Bek receptor (or FGFR-2), FGFR-3, FGFR-4, FGFR-5 and FGFR-6. These receptors usually contain an extracellular ligand-binding region containing three immunoglobulin-like domains, a transmembrane domain and a cytoplasmic tyrosine kinase domain. The gene encoding human Bek (also designated K-sam) maps to chromosome 10q26.13 and is alternatively spliced to produce several isoforms. Heterogeneous mutations in Bek are associated with a range of craniosynostosis syndromes including Pfeiffer syndrome, Crouzon syndrome, Jackson-Weiss syndrome and Apert syndrome.

CHROMOSOMAL LOCATION

Genetic locus: FGFR2 (human) mapping to 10q26.13; Fgfr2 (mouse) mapping to 7 F3.

SOURCE

Bek (C-17) is available as either rabbit (sc-122) or goat (sc-122-G) affinity purified polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of Bek of human origin.

PRODUCT

Each vial contains either 100 µg (sc-122) or 200 µg (sc-122-G) IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for ChIP application, sc-122 X, 100 µg/0.1 ml.

Bek (C-17) is available conjugated to agarose (sc-122 AC), 500 µg/0.25 ml agarose in 1 ml, for IP.

Blocking peptide available for competition studies, sc-122 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Bek (C-17) is recommended for detection of Bek of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], mmunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Bek (C-17) is also recommended for detection of Bek in additional species, including equine, canine and bovine.

Suitable for use as control antibody for Bek siRNA (h): sc-29218, Bek siRNA (m): sc-29799, Bek shRNA Plasmid (h): sc-29218-SH, Bek shRNA Plasmid (m): sc-29799-SH, Bek shRNA (h) Lentiviral Particles: sc-29218-V and Bek shRNA (m) Lentiviral Particles: sc-29799-V.

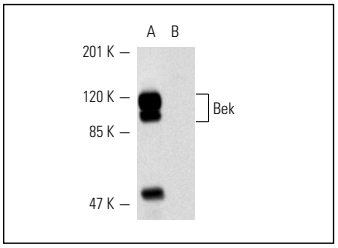
Bek (C-17) X TransCruz antibody is recommended for ChIP assays.

Molecular Weight of Bek monomer: 110/120 kDa.

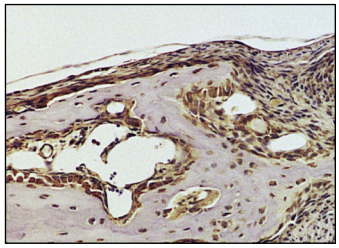
STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



Bek (C-17): sc-122. Western blot analysis of Bek transfected (**A**) and non-transfected control (**B**) NIH/3T3 whole cell lysates. Cells kindly provided by D. Bottaro.



Bek (C-17): sc-122. Immunoperoxidase staining of formalin-fixed, paraffin-embedded rat cranial suture.

SELECT PRODUCT CITATIONS

1. Del Rio-Tsonis, K., et al. 1997. Conservation of fibroblast growth factor function in lens regeneration. Proc. Natl. Acad. Sci. USA 94: 13701-13706.
2. Wang, J., et al. 2011. Antitumor activity of a recombinant soluble ectodomain of mutant human fibroblast growth factor receptor-2 IIIc. Mol. Cancer Ther. 10: 1656-1666.
3. Cerliani, J.P., et al. 2011. Associated expressions of FGFR-2 and FGFR-3: from mouse mammary gland physiology to human breast cancer. Breast Cancer Res. Treat. 133: 997-1008.
4. Belleudi, F., et al. 2011. Expression and signaling of the tyrosine kinase FGFR2b/KGFR regulates phagocytosis and melanosome uptake in human keratinocytes. FASEB J. 25: 170-181.
5. Martin, A.J., et al. 2011. FGFR2 protein expression in breast cancer: nuclear localisation and correlation with patient genotype. BMC Res. Notes 4: 72.
6. Kapeli, K. and Hurlin, PJ. 2011. Differential regulation of N-Myc and c-Myc synthesis, degradation, and transcriptional activity by the Ras/mitogen-activated protein kinase pathway. J. Biol. Chem. 286: 38498-38508.
7. Volckaert, T., et al. 2011. Parabronchial smooth muscle constitutes an airway epithelial stem cell niche in the mouse lung after injury. J. Clin. Invest. 121: 4409-4419.

RESEARCH USE

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

MONOS Satisfaction Guaranteed

Try **Bek (C-8): sc-6930**, our highly recommended monoclonal alternative to Bek (C-17). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **Bek (C-8): sc-6930**.