SANTA CRUZ BIOTECHNOLOGY, INC.

p-Bad (Ser 112): sc-7998



BACKGROUND

Phosphorylation of Bad, a pro-apoptotic member of the Bcl-2 protein family, on either Serine 112 or Serine 136 is thought to be necessary and sufficient for growth factors to promote cell survival. Serine 155 is a major site of phosphorylation by protein kinase A (PKA) and serum-induced kinases. Serine 155 phosphorylation requires the prior phosphorylation of Serine 136, which recruits 14-3-3 proteins that then function to increase the accessibility of Serine 155 to survival-promoting kinases. Like Serine 112 and Serine 136, phosphorylation of Serine 155 inhibits the pro-apoptotic function of Bad. Serine 155 phosphorylation disrupts the binding of Bad to pro-survival Bcl-2 proteins and thereby promotes cell survival.

CHROMOSOMAL LOCATION

Genetic locus: BAD (human) mapping to 11q13.1; Bad (mouse) mapping to 19 A.

SOURCE

p-Bad (Ser 112) is available as either goat (sc-7998) or rabbit (sc-7998-R) polyclonal affinity purified antibody raised against a short amino acid sequence containing Ser 112 phosphorylated Bad of mouse origin.

PRODUCT

Each vial contains 200 μg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-7998 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

p-Bad (Ser 112) is recommended for detection of Ser 112 phosphorylated Bad of mouse origin, Ser 113 phosphorylated Bad of rat origin, and Ser 75 phosphorylated Bad of human origin 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)], immuno-fluorescence (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).

Suitable for use as control antibody for Bad siRNA (h): sc-29778, Bad siRNA (m): sc-29779, Bad shRNA Plasmid (h): sc-29778-SH, Bad shRNA Plasmid (m): sc-29779-SH, Bad shRNA (h) Lentiviral Particles: sc-29778-V and Bad shRNA (m) Lentiviral Particles: sc-29779-V.

Molecular Weight (predicted) of p-Bad: 22 kDa.

Molecular Weight (observed) of p-Bad: 23/28 kDa.

Positive Controls: HeLa + Calyculin A cell lysate: sc-2271.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

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

DATA



p-Bad (Ser 112): sc-7998. Immunoperoxidase staining of formalin fixed, paraffin-embedded human fallopian tube tissue showing cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

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- Liu, S., et al. 2010. FRP inhibits ox-LDL-induced endothelial cell apoptosis through an Akt-NFκB-Bcl-2 pathway and inhibits endothelial cell apoptosis in an apoE-knockout mouse model. Am. J. Physiol. Endocrinol. Metab. 299: E351-E363.
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- Zhang, S., et al. 2013. P2Y12 protects platelets from apoptosis via Pl3k-dependent Bak/Bax inactivation. J. Thromb. Haemost. 11: 149-160.
- Gravina, G.L., et al. 2015. Dual PI3K/mTOR inhibitor, XL765 (SAR245409), shows superior effects to sole PI3K [XL147 (SAR245408)] or mTOR [rapamycin] inhibition in prostate cancer cell models. Tumour Biol. E-published.

MONOS Satisfation Guaranteed

Try **p-Bad (C-10): sc-166932**, our highly recommended monoclonal aternative to p-Bad (Ser 112).