

BRIDGE-1 (P-15): sc-10670

BACKGROUND

BRIDGE-1, a protein homologous to a previously cloned proteasome subunit, p27, is important in regulating Insulin and other islet genes in the pancreas. BRIDGE-1 is highly expressed in pancreatic β -cells and is predominantly located in the nucleus, although lower levels are expressed in the cytoplasm. BRIDGE-1 contains a conserved PDZ-like domain that mediates protein-protein interactions in a variety of intracellular signaling processes, including the transactivational activity of E2A. One mechanism of the activation of gene transcription in pancreatic β -cells is the interaction of E2A with coactivating proteins such as CBP, p300 and BRIDGE-1. The interaction of E12 and E47, members of the E2A family of transcription factors, with the PDZ-domain of BRIDGE-1 suggest a novel mechanism for Insulin gene regulation.

REFERENCES

1. German, M.S. et al. 1994. The Insulin gene contains multiple transcriptional elements that respond to glucose. *Mol. Cell. Biol.* 14: 4067-4075.
2. Cordier-Bussat, M. et al. 1995. Homologous DNA sequences and cellular factors are implicated in the control of glucagon and Insulin gene expression. *Mol. Cell. Biol.* 15: 3904-3916.
3. Eckner, R. et al. 1996. Interaction and functional collaboration of p300/CBP and bHLH proteins in muscle and B-cell differentiation. *Genes Dev.* 10: 2478-2490.
4. Saras, J. and Heldin, C.H. 1996. PDZ domains bind carboxy-terminal sequences of target proteins. *Trends Biochem. Sci.* 21: 455-458.

CHROMOSOMAL LOCATION

Genetic locus: PSMD9 (human) mapping to 12q24.31; Psmd9 (mouse) mapping to 5 F.

SOURCE

BRIDGE-1 (P-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of BRIDGE-1 of rat origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-10670 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-10670 X, 200 μ g/0.1 ml.

STORAGE

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

PROTOCOLS

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

APPLICATIONS

BRIDGE-1 (P-15) is recommended for detection of BRIDGE-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (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).

BRIDGE-1 (P-15) is also recommended for detection of BRIDGE-1 in additional species, including canine and porcine.

Suitable for use as control antibody for BRIDGE-1 siRNA (h): sc-105127, BRIDGE-1 siRNA (m): sc-141747, BRIDGE-1 shRNA Plasmid (h): sc-105127-SH, BRIDGE-1 shRNA Plasmid (m): sc-141747-SH, BRIDGE-1 shRNA (h) Lentiviral Particles: sc-105127-V and BRIDGE-1 shRNA (m) Lentiviral Particles: sc-141747-V.

BRIDGE-1 (P-15) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

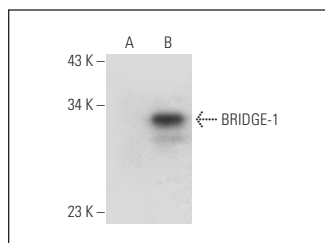
Molecular Weight of BRIDGE-1: 25 kDa.

Positive Controls: KNRK whole cell lysate: sc-2214, Hep G2 cell lysate: sc-2227 or BRIDGE-1 (h2): 293T Lysate: sc-176928.

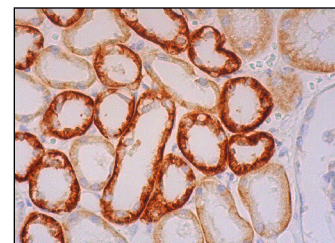
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



BRIDGE-1 (P-15): sc-10670. Western blot analysis of BRIDGE-1 expression in non-transfected: sc-117752 (A) and human BRIDGE-1 transfected: sc-176928 (B) 293T whole cell lysates.



BRIDGE-1 (P-15): sc-10670. Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing cytoplasmic staining of cells in tubules.

RESEARCH USE

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