

BRIDGE-1 (30): sc-136438

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. and Wang, J. 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. Saras, J. and Heldin, C.H. 1996. PDZ domains bind carboxy-terminal sequences of target proteins. *Trends Biochem. Sci.* 21: 455-458.
4. 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.
5. Watanabe, T.K., et al. 1998. cDNA cloning and characterization of a human proteasomal modulator subunit, p27 (PSMD9). *Genomics* 50: 241-250.

CHROMOSOMAL LOCATION

Genetic locus: PSMD9 (human) mapping to 12q24.31; Psm9 (mouse) mapping to 5 F.

SOURCE

BRIDGE-1 (30) is a mouse monoclonal antibody raised against amino acids 72-172 of BRIDGE-1 of rat origin.

PRODUCT

Each vial contains 200 μ g IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-136438 X, 200 μ g/0.1 ml.

BRIDGE-1 (30) is available conjugated to agarose (sc-136438 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-136438 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-136438 PE), fluorescein (sc-136438 FITC), Alexa Fluor[®] 488 (sc-136438 AF488), Alexa Fluor[®] 546 (sc-136438 AF546), Alexa Fluor[®] 594 (sc-136438 AF594) or Alexa Fluor[®] 647 (sc-136438 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-136438 AF680) or Alexa Fluor[®] 790 (sc-136438 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

BRIDGE-1 (30) is recommended for detection of BRIDGE-1 of mouse, rat, human and canine origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)].

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 (30) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

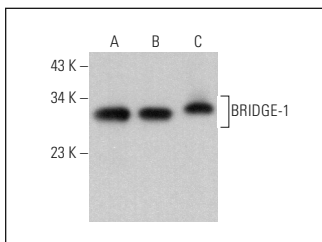
Molecular Weight of BRIDGE-1: 25 kDa.

Positive Controls: rat testis extract: sc-2400, KNRK whole cell lysate: sc-2214 or c4 whole cell lysate: sc-364186.

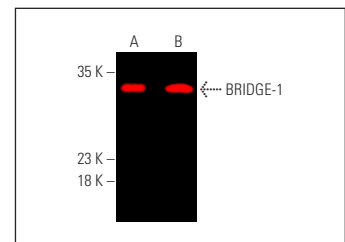
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



BRIDGE-1 (30): sc-136438. Western blot analysis of BRIDGE-1 expression in rat testis tissue extract (A) and KNRK (B) and c4 (C) whole cell lysates.



BRIDGE-1 (30): sc-136438. Near-infrared western blot analysis of BRIDGE-1 expression in rat testis tissue extract (A) and KNRK whole cell lysate (B). Blocked with UltraCruz[®] Blocking Reagent: sc-516214. Detection reagent used: m-IgG κ BP-CFL 790: sc-516181.

STORAGE

Store at 4° C, **DO 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.

PROTOCOLS

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