SANTA CRUZ BIOTECHNOLOGY, INC.

p8 (T-14): sc-23283

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The human p8 (candidate of metastasis 1) gene maps to chromosome 16p11.2 and encodes a transcription factor that regulates pancreatic growth. p8 upregulates the glucagon gene promoter by recruiting the p300 cofactor to increase Pax2A and Pax2B activity and by binding the Pax2-interacting protein PTIP to suppress its inhibition. p8 is present at high levels in pancreatic acinar cells during the acute phase of pancreatitis in developing pancreas and during pancreatic regeneration. Acinar cells upregulate p8 mRNA in response to cellular pancreatitis-induced injury. *In vitro* studies suggest that p8 mRNA is induced in pancreatic and non-pancreatic cells in response to apoptotic stimuli.

REFERENCES

1. Mallo, G.V., et al. 1997. Cloning and expression of the rat p8 cDNA, a new gene activated in pancreas during the acute phase of pancreatitis, pancreatic development and regeneration, and which promotes cellular growth. J. Biol. Chem. 272: 32360-32369.
2. Ree, A.H., et al. 1999. Expression of a novel factor in human breast cancer cells with metastatic potential. Cancer Res. 59: 4675-4680.

CHROMOSOMAL LOCATION

Genetic locus: NUPR1 (human) mapping to 16p11.2; Nupr1 (mouse) mapping to 7 F3.

SOURCE

p8 (T-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of p8 of human 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-23283 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

p8 (T-14) is recommended for detection of p8 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)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

p8 (T-14) is also recommended for detection of p8 in additional species, including canine.

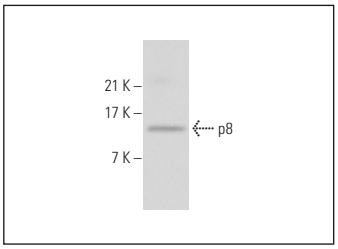
Suitable for use as control antibody for p8 siRNA (h): sc-40792, p8 siRNA (m): sc-40793, p8 shRNA Plasmid (h): sc-40792-SH, p8 shRNA Plasmid (m): sc-40793-SH, p8 shRNA (h) Lentiviral Particles: sc-40792-V and p8 shRNA (m) Lentiviral Particles: sc-40793-V.

Positive Controls: mouse pancreas extract: sc-364244.

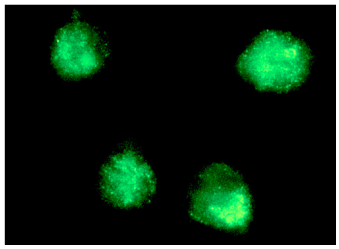
RECOMMENDED SECONDARY REAGENTS

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.

DATA



p8 (T-14): sc-23283. Western blot analysis of p8 expression in mouse pancreas tissue extract.



p8 (T-14): sc-23283. Immunofluorescence staining of methanol-fixed MIA PaCa-2 cells showing nuclear localization.

SELECT PRODUCT CITATIONS

1. Jiang, W.G., et al. 2005. Com-1/p8 in oestrogen regulated growth of breast cancer cells, the ERβ connection. Biochem. Biophys. Res. Commun. 330: 253-262.
2. Jiang, W.G., et al. 2005. Expression of Com-1/p8 in human breast cancer, and its relevance to clinical outcome and ER status. Int. J. Cancer 117: 730-737.
3. Jiang, W.G., et al. 2006. Com-1/p8 acts as a putative tumour suppressor in prostate cancer. Int. J. Mol. Med. 18: 981-986.
4. Jiang, W.G., et al. 2006. Does the PGC-1/PPARγ pathway play a role in Com-1/p8 mediated cell growth inhibition in prostate cancer? Int. J. Mol. Med. 18: 1169-1175.
5. Clark, D.W., et al. 2008. NUPR1 interacts with p53, transcriptionally regulates p21 and rescues breast epithelial cells from doxorubicin-induced genotoxic stress. Curr. Cancer Drug Targets 8: 421-430.
6. Du, P., et al. 2013. Candidate of metastasis 1 regulates *in vitro* growth and invasion of bladder cancer cells. Int. J. Oncol. 42: 1249-1256.

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.