SANTA CRUZ BIOTECHNOLOGY, INC.

QM (N-17): sc-799

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The c-Jun protein is a major component of the transcription factor AP-1, originally shown to mediate phorbol ester tumor promoter (TPA)-induced expression of responsive genes through the TPA-response element (TRE). The Jun proteins form homo- and heterodimers which bind the TRE, while Fos proteins are active only as heterodimers with any of the Jun proteins. Fos/Jun heterodimers have a much higher affinity for the TRE than Jun homodimers. A distant member of the MAP kinase family, designated c-Jun NH_2-terminal kinase (JNK1) functions to regulate c-Jun by phosphorylation at the amino terminal serine regulatory sites, Ser 63 and Ser 73). QM has been described as a transcription factor that can function to bind DNA directly or alternatively can interact with c-Jun to inhibit transactivation of AP-1 promoter driven reporter vectors by Jun-Jun homodimers. QM is highly conserved throughout eukaryotic evolution and is apparently a member of a multi-gene family.

REFERENCES

1. Sambucetti, L.C. and Curran, T. 1986. The Fos protein complex is associated with DNA in isolated nuclei and binds to DNA cellulose. Science 234: 1417-1419.
2. Bohmann, D., et al. 1987. Human proto-oncogene c-Jun encodes a DNA binding protein with structural and functional properties of transcription factor AP-1. Science 238: 1386-1392.
3. Angel, P., et al. 1988. Oncogene jun encodes a sequence-specific trans-activator similar to AP-1. Nature 332: 166-171.

CHROMOSOMAL LOCATION

Genetic locus: RPL10L (human) mapping to 14q21.2; Rpl10 (mouse) mapping to X A7.3.

SOURCE

QM (N-17) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the N-terminus of QM 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-799 P, (100 µg 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-799 X, 200 µg/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

QM (N-17) is recommended for detection of QM 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).

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

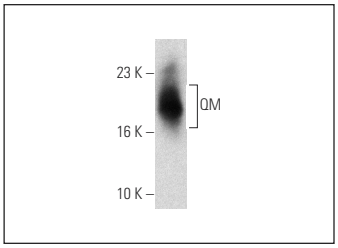
Suitable for use as control antibody for QM siRNA (h): sc-36334, QM siRNA (m): sc-36335, QM shRNA Plasmid (h): sc-36334-SH, QM shRNA Plasmid (m): sc-36335-SH, QM shRNA (h) Lentiviral Particles: sc-36334-V and QM shRNA (m) Lentiviral Particles: sc-36335-V.

QM (N-17) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

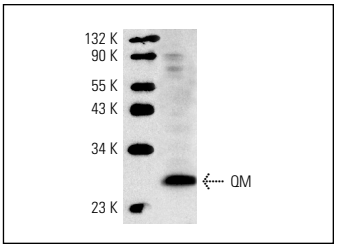
Molecular Weight of QM: 24 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, K-562 nuclear extract: sc-2130 or Jurkat whole cell lysate: sc-2204.

DATA



QM (N-17): sc-799. Western blot analysis of QM expression in mouse testis tissue extract.



QM (N-17): sc-799. Western blot analysis of QM expression in HeLa whole cell lysate.

SELECT PRODUCT CITATIONS

1. Wiens, M., et al. 1999. A homolog of the putative tumor suppressor QM in the sponge *Suberites domuncula:* downregulation during the transition from immortal to mortal (apoptotic) cells. Tissue Cell 31: 163-169.
2. Zhang, Y., et al. 2003. Molecular cloning and expression of a pearl oyster *(Pinctada fucata)* homologue of mammalian putative tumor suppressor QM. Mar. Biotechnol. 6: 8-16.
3. Dublineau, I., et al. 2004. Functional and structural alterations of epithelial barrier properties of rat ileum following X-irradiation. Can. J. Physiol. Pharmacol. 82: 84-93.
4. Altinok, G., et al. 2006. Reduction of QM protein expression correlates with tumor grade in prostatic adenocarcinoma. Prostate Cancer Prostatic Dis. 9: 77-82.

RESEARCH USE

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