SANTA CRUZ BIOTECHNOLOGY, INC.

QM (C-17): sc-798

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.

CHROMOSOMAL LOCATION

Genetic locus: RPL10 (human) mapping to Xq28; Rpl10 (mouse) mapping to X A7.3.

SOURCE

QM (C-17) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping at the C-terminus of QM of human origin (differs from corresponding mouse sequence by a single amino acid).

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-798 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-798 X, 200 µg/0.1 ml.

APPLICATIONS

QM (C-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), 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).

QM (C-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.

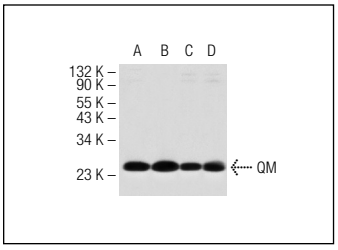
QM (C-17) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of QM: 24 kDa.

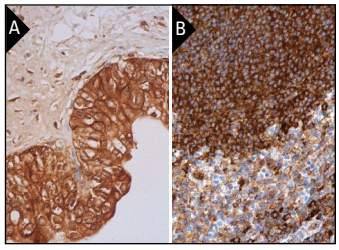
STORAGE

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

DATA



QM (C-17): sc-798. Western blot analysis of QM expression in Jurkat (**A**) and K-562 (**B**) whole cell lysates and Jurkat (**C**) and K-562 (**D**) nuclear extracts.



QM (C-17): sc-798. Immunoperoxidase stain-ing of formalin fixed, paraffin-embedded human urinary bladder tissue showing cytoplasmic and membrane staining of urothelial cells (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human spleen tissue showing cytoplasmic staining of cells in red and white pulps. Kindly provided by The Swedish Human Protein Atlas (HPA) program (**B**).

SELECT PRODUCT CITATIONS

1. Villalonga, P., et al. 2000. [Lys61]N-Ras is able to induce full activation and nuclear accumulation of Cdk4 in NIH/3T3 cells. Oncogene 19: 690-699.
2. Ganesh, S., et al. 2000. Laforin, defective in the progressive myoclonus epilepsy of Lafora type, is a dual-specificity phosphatase associated with polyribosomes. Hum. Mol. Genet. 9: 2251-2261.
3. Wiese, C., et al. 2002. Interactions involving the Rad51 paralogs Rad51C and XRCC3 in human cells. Nucleic Acids Res. 30: 1001-1008.
4. Thomas, F., et al. 2003. Biogenesis and nuclear export of ribosomal subunits in higher eukaryotes depend on the CRM1 export pathway. J. Cell Sci. 116: 2409-2419.
5. Altinok, G., et al. 2006. Reduction of QM protein expression correlates with tumor grade in prostatic adenocarcinoma. Prostate Cancer Prostatic Dis. 9: 77-82.
6. Franchini, C., et al. 2006. Apoptosis promoted by up-regulation of TFPT (TCF3 fusion partner) appears p53 independent, cell type restricted and cell density influenced. Apoptosis 11: 2217-2224.
7. Miyoshi, M., et al. 2007. Bystin in human cancer cells: intracellular localization and function in ribosome biogenesis. Biochem. J. 404: 373-381.
8. Soliman, M.A., et al. 2008. ING1a expression increases during replicative senescence and induces a senescent phenotype. Aging Cell 7: 783-794.
9. Baldassa, S., et al. 2010. N-terminal interaction domain implicates PAK4 in translational regulation and reveals novel cellular localization signals. J. Cell. Physiol. 224: 722-733.

RESEARCH USE

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