SANTA CRUZ BIOTECHNOLOGY, INC.

QKI (U-24): sc-130861

BACKGROUND

QKI, also known as HKQ, QK, QK3 or quaking, is a 341 amino acid protein that localizes to both the cytoplasm and the nucleus and contains one KH domain. Expressed in the frontal cortex of the brain, QKI functions as an RNA-binding protein that plays an important role in myelinization and specifically binds to the RNA core sequence 5'-NACUAAY-N(1,20)-UAAY-3'. Additionally, QKI regulates pre-mRNA splicing, and mRNA export and is involved in protecting and promoting the stability of select mRNAs. QKI may be methylated by PRMT1 and may also be phosphorylated at its C-terminus, an event that decreases QKI mRNA-binding affinity. Defects or deletions in the gene encoding QKI are associated with astrocytic tumors and may be involved in the pathogenesis of schizophrenia. Multiple isoforms of QKI exist due to alternative splicing events.

REFERENCES

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3. Chen, T. and Richard, S. 1998. Structure-function analysis of QKI: a lethal point mutation in mouse quaking prevents homodimerization. Mol. Cell. Biol. 18: 4863-4871.
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7. Yamamoto, Y., et al. 2003. Retrotransposon-mediated restoration of *Chlorella telomeres*: accumulation of Zepp retrotransposons at termini of newly formed minichromosomes. Nucleic Acids Res. 31: 4646-4653.
8. Aberg, K., et al. 2006. Human QKI, a potential regulator of mRNA expression of human oligodendrocyte-related genes involved in schizophrenia. Proc. Natl. Acad. Sci. USA 103: 7482-7487.
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CHROMOSOMAL LOCATION

Genetic locus: QKI (human) mapping to 6q26.

STORAGE

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

SOURCE

QKI (U-24) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of QKI of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

QKI (U-24) is recommended for detection of QKI of 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for QKI siRNA (h): sc-95183, QKI shRNA Plasmid (h): sc-95183-SH and QKI shRNA (h) Lentiviral Particles: sc-95183-V.

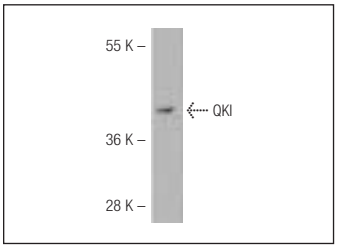
Molecular Weight of QKI: 45 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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).

DATA



QKI (U-24): sc-130861. Western blot analysis of QKI expression in Jurkat whole cell lysate.

RESEARCH USE

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

PROTOCOLS

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