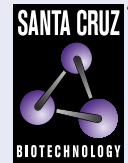


## QKI (N147/6): sc-517305



The Power to Question

## 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 myelination and specifically binds to the RNA core sequence 5'-NACUAAAY-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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- Ebersole, T.A., et al. 1996. The quaking gene product necessary in embryogenesis and myelination combines features of RNA binding and signal transduction proteins. *Nat. Genet.* 12: 260-265.
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## CHROMOSOMAL LOCATION

Genetic locus: QKI (human) mapping to 6q26; Qk (mouse) mapping to 17 A1.

## SOURCE

QKI (N147/6) is a mouse monoclonal antibody raised against a recombinant fusion protein corresponding to full length QKI-5 of human origin.

## PRODUCT

Each vial contains 100 µg IgG<sub>2b</sub> in 1.0 ml of PBS with < 0.1% sodium azide, 1% Glycerol, and 0.1% gelatin.

## STORAGE

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

## APPLICATIONS

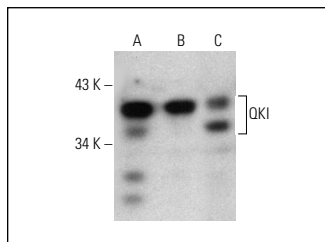
QKI (N147/6) is recommended for detection of pan QKI of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for QKI siRNA (h): sc-95183, QKI siRNA (m): sc-106468, QKI shRNA Plasmid (h): sc-95183-SH, QKI shRNA Plasmid (m): sc-106468-SH, QKI shRNA (h) Lentiviral Particles: sc-95183-V and QKI shRNA (m) Lentiviral Particles: sc-106468-V.

Molecular Weight of QKI: 45 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, SK-N-MC cell lysate: sc-2237 or rat brain extract: sc-2392.

## DATA



QKI (N147/6): sc-517305. Western blot analysis of QKI expression in K-562 (A) and SK-N-MC (B) whole cell lysates and rat brain tissue extract (C).

## SELECT PRODUCT CITATIONS

- Kleemann, M., et al. 2019. Induction of apoptosis in ovarian cancer cells by miR-493-3p directly targeting Akt2, STK38L, HMGA2, Ets1 and E2F5. *Cell. Mol. Life Sci.* 76: 539-559.
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- Maghe, C., et al. 2024. The paracaspase MALT1 controls cholesterol homeostasis in glioblastoma stem-like cells through lysosome proteome shaping. *Cell Rep.* 43: 113631.
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## RESEARCH USE

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