



Rabbit Anti-QK1 antibody

SL11579R

Product Name:	QK1
Chinese Name:	RNABinding proteinQK1抗体
Alias:	HKQ; Homolog of mouse quaking QKI KH domain RNA binding protein; Hqk; HQK1; HqkI; Protein quaking; QK; QK1; QK3; QKI; QKI_HUMAN; QKI1; Quaking homolog; Quaking homolog KH domain RNA binding; Quaking homolog KH domain RNA binding mouse; Quaking isoform 1; Quaking protein; RNA binding protein HQK.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Chicken,Horse,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	38kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human QK1:220/341/341
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	QKI 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)-UAAAY-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.

Function:

RNA-binding protein that plays a central role in myelination. Binds to the 5'-NACUAAAY-N(1,20)-UAAAY-3' RNA core sequence. Acts by regulating pre-mRNA splicing, mRNA export, mRNA stability and protein translation. Required to protect and promote stability of mRNAs such as MBP and CDKN1B. Regulator of oligodendrocyte differentiation and maturation in the brain that may play a role in myelin and oligodendrocyte dysfunction in schizophrenia. Participates in mRNA transport by regulating the nuclear export of MBP mRNA. Also involved in regulation of mRNA splicing of MAG pre-mRNA. Acts as a translational repressor.

Subunit:

Homodimer. Does not require RNA to homodimerize. Able to heterodimerize with BICC1

Subcellular Location:

Nucleus. Cytoplasm.

Tissue Specificity:

Expressed in the frontal cortex of brain. Down-regulated in the brain of schizophrenic patients.

Post-translational modifications:

Methylated by PRMT1. Tyrosine phosphorylated at its C-terminus, probably by FYN. Phosphorylation leads to decreased mRNA-binding affinity, affecting transport and/or stabilization of MBP mRNA.

Similarity:

Contains 1 KH domain.

SWISS:

Q96PU8

Gene ID:

9444

Database links:

[Entrez Gene: 9444](#)Human

[Entrez Gene: 19317](#)Mouse

[Entrez Gene: 499022](#)Rat

[Omim: 609590](#)Human

[SwissProt: Q96PU8](#)Human

[SwissProt: Q9QYS9](#)Mouse

[SwissProt: Q91XU1](#)Rat

[Unigene: 510324](#)Human

[Unigene: 130694](#)Mouse

[Unigene: 384135](#)Mouse

[Unigene: 393248](#)Mouse

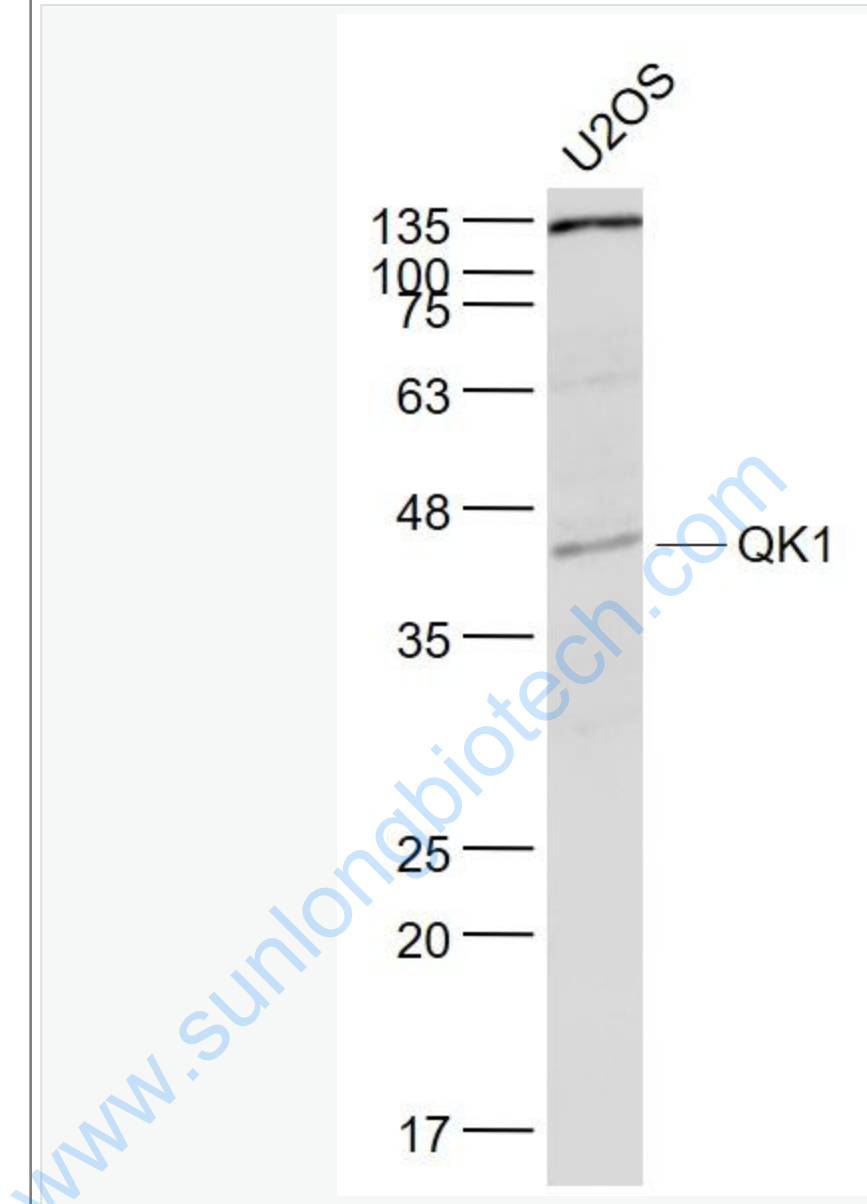
[Unigene: 228876](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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Picture:



Sample:

U2OS(Human) Cell Lysate at 30 ug

Primary: Anti- QK1 (SL11579R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 38 kD

	Observed band size: 40 kD
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