

QKI Antibody (N-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2707a**Specification**

QKI Antibody (N-term) - Product Information

Application	IHC-P, WB,E
Primary Accession	Q96PU8
Other Accession	Q5W9D5 , Q9OYS9 , Q5W9D7 , Q6P104 , Q32NN2 , Q5W9D6
Reactivity	Human, Mouse
Predicted	Xenopus, Zebrafish, Bovine, Horse, Pig
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	1-30

QKI Antibody (N-term) - Additional Information**Gene ID** 9444**Other Names**

Protein quaking, Hqk, Hqkl, QKI, HKQ

Target/Specificity

This QKI antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human QKI.

Dilution

IHC-P~~1:100

WB~~1:2000

E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

QKI Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

QKI Antibody (N-term) - Protein Information**Name** QKI {ECO:0000303|PubMed:16342280, ECO:0000312|HGNC:HGNC:21100}

Function RNA reader protein, which recognizes and binds specific RNAs, thereby regulating RNA metabolic processes, such as pre-mRNA splicing, circular RNA (circRNA) formation, mRNA export, mRNA stability and/or translation (PubMed:[22398723](#), PubMed:[23630077](#), PubMed:[25768908](#), PubMed:[27029405](#), PubMed:[31331967](#), PubMed:[37379838](#)). Involved in various cellular processes, such as mRNA storage into stress granules, apoptosis, lipid deposition, interferon response, glial cell fate and development (PubMed:[25768908](#), PubMed:[31829086](#), PubMed:[34428287](#), PubMed:[37379838](#)). Binds to the 5'-NACUAAAY-N(1,20)-UAAAY-3' RNA core sequence (PubMed:[23630077](#)). Acts as a mRNA modification reader that specifically recognizes and binds mRNA transcripts modified by internal N(7)-methylguanine (m7G) (PubMed:[37379838](#)). Promotes the formation of circular RNAs (circRNAs) during the epithelial to mesenchymal transition and in cardiomyocytes: acts by binding to sites flanking circRNA-forming exons (PubMed:[25768908](#)). CircRNAs are produced by back-splicing circularization of pre-mRNAs (PubMed:[25768908](#)). Plays a central role in myelination via 3 distinct mechanisms (PubMed:[16641098](#)). First, acts by protecting and promoting stability of target mRNAs such as MBP, SIRT2 and CDKN1B, which promotes oligodendrocyte differentiation (By similarity). Second, participates in mRNA transport by regulating the nuclear export of MBP mRNA (By similarity). Finally, indirectly regulates mRNA splicing of MAG pre-mRNA during oligodendrocyte differentiation by acting as a negative regulator of MAG exon 12 alternative splicing: acts by binding to HNRNPA1 mRNA splicing factor, preventing its translation (By similarity). Involved in microglia differentiation and remyelination by regulating microexon alternative splicing of the Rho GTPase pathway (By similarity). Involved in macrophage differentiation: promotes monocyte differentiation by regulating pre-mRNA splicing in naive peripheral blood monocytes (PubMed:[27029405](#)). Acts as an important regulator of muscle development: required for the contractile function of cardiomyocytes by regulating alternative splicing of cardiomyocyte transcripts (By similarity). Acts as a negative regulator of thermogenesis by decreasing stability, nuclear export and translation of mRNAs encoding PPARGC1A and UCP1 (By similarity). Also required for visceral endoderm function and blood vessel development (By similarity). May also play a role in smooth muscle development (PubMed:[31331967](#)). In addition to its RNA-binding activity, also acts as a nuclear transcription coactivator for SREBF2/SREBP2 (By similarity).

Cellular Location

Nucleus. Cytoplasm [Isoform QKI6]: Cytoplasm, cytosol. Nucleus Note=Localizes predominantly in the cytoplasm and at lower levels in nucleus.

Tissue Location

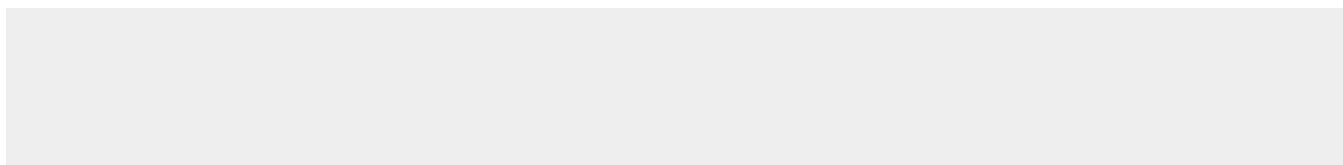
Expressed in the frontal cortex of brain. Down-regulated in the brain of schizophrenic patients

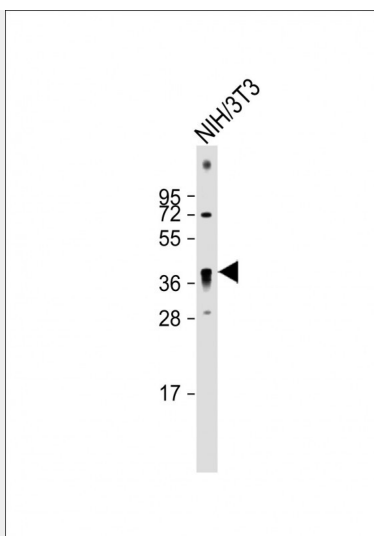
QKI Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

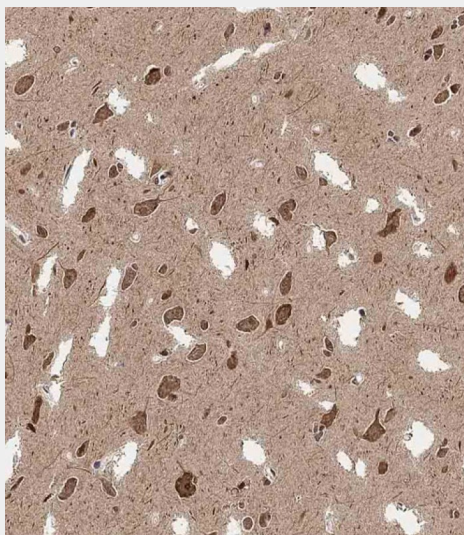
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

QKI Antibody (N-term) - Images

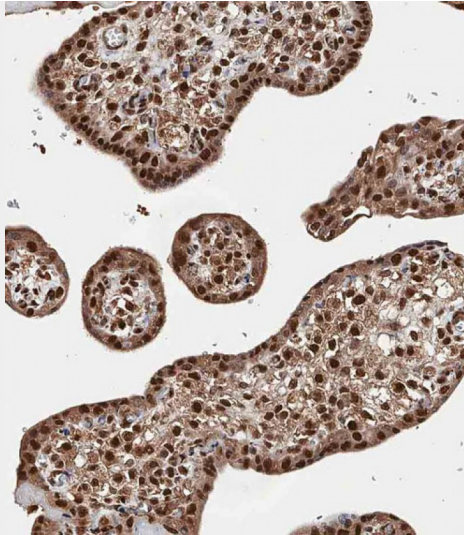




Anti-QKI Antibody (N-term) at 1:2000 dilution + NIH/3T3 whole cell lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 38 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Immunohistochemical analysis of AP2707A on paraffin-embedded Human brain tissue. Tissue was fixed with formaldehyde at room temperature. Heat induced epitope retrieval was performed by EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:100) for 1 hour at room temperature. Undiluted CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.



Immunohistochemical analysis of AP2707A on paraffin-embedded Human placenta tissue. Tissue was fixed with formaldehyde at room temperature. Heat induced epitope retrieval was performed by EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:100) for 1 hour at room temperature. Undiluted CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.

QKI Antibody (N-term) - Background

QKI belongs to a family of RNA-binding proteins that have an HNRNPK homology (KH) domain embedded in a 200-amino acid region called the GSG domain. Other members of this family include SAM68 (KHDRBS1) and SF1.

QKI Antibody (N-term) - References

Zhao,L., J. Neurosci. 26 (44), 11278-11286 (2006)
Haroutunian,V., Am J Psychiatry 163 (10), 1834-1837 (2006)
Aberg,K., Proc. Natl. Acad. Sci. U.S.A. 103 (19), 7482-7487 (2006)