

AM60063PU-N

Monoclonal Antibody to QKI / Protein quaking (pan) - Purified

Alternate names:	HKQ, QK1, QK3
Quantity:	0.1 mg
Concentration:	1.0 mg/ml
Background:	QKI is also called Protein Quaking or Hqkl. QKI is an RNA-binding protein that plays a central role in myelination. QKI acts by regulating pre-mRNA splicing, mRNA export, mRNA stability and protein translation, and is itself, regulated by alternative splicing. QKI is expressed in the frontal cortex of brain, but is shown to be down-regulated in the brain of schizophrenic patients. Several isoforms are known.
Uniprot ID:	Q96PU8
NCBI:	NP_006766.1
GeneID:	9444
Host / Isotype:	Mouse / IgG2b
Recommended Isotype Controls:	SM12P, AM03110PU-N
Clone:	S147-6
Immunogen:	Fusion protein amino acids 1-341 (full-length) of human QKI-5 (accession number Q96PU8, isoform 1) with >90% identity with QKI-6, QKI-7 and QKI-7b.
Format:	State: Liquid purified IgG fraction Purification: Protein G chromatography Buffer System: PBS pH 7.4, 50% Glycerol, 0.09% Sodium azide
Applications:	Western blot: 1/1000; 1 µg/ml was sufficient for detection of QKI (pan) in 20 µg of rat brain lysate by colorimetric immunoblot analysis using HRP conjugated secondary antibody. Immunocytochemistry. Immunohistochemistry: Free floating sections, fixed in formaldehyde. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody detects a 36-38 kDa protein corresponding to the molecular weight of QKI (pan).
Species Reactivity:	Tested: Human. Expected from sequence similarity: Mouse (100% identity), Rat (99% identity).
Storage:	Upon receipt, store undiluted (in aliquots) at -20°C. Avoid repeated freezing and thawing. Shelf life: One year from despatch.
General Readings:	1. Zhao L, Tian D, Xia M, Macklin WB, Feng Y. Rescuing qkv dysmyelination by a single isoform of the selective RNA-binding protein QKI. J Neurosci. 2006 Nov 1;26(44):11278-86. PubMed PMID: 17079655. 2. Haroutunian V, Katsel P, Dracheva S, Davis KL. The human homolog of the QKI gene

affected in the severe dysmyelination "quaking" mouse phenotype: downregulated in multiple brain regions in schizophrenia. *Am J Psychiatry*. 2006 Oct;163(10):1834-7. PubMed PMID: 17012699.

3. Aberg K, Saetre P, Jareborg N, Jazin E. Human QKI, a potential regulator of mRNA expression of human oligodendrocyte-related genes involved in schizophrenia. *Proc Natl Acad Sci U S A*. 2006 May 9;103(19):7482-7. Epub 2006 Apr 25. PubMed PMID: 16641098.

4. Larocque D, Fragoso G, Huang J, Mushynski WE, Lignon M, Richard S, et al. The QKI-6 and QKI-7 RNA binding proteins block proliferation and promote Schwann cell myelination. *PLoS One*. 2009 Jun 11;4(6):e5867. doi: 10.1371/journal.pone.0005867. PubMed PMID: 19517016.