

Product datasheet

Anti-QKI antibody [EPR7306] ab126742

KO VALIDATED

Recombinant

RabMAb

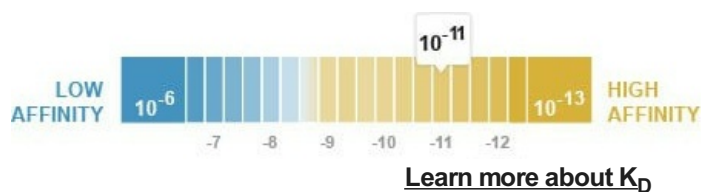
★★★★☆ 2 Abreviews 16 References 7 Images

Overview

Product name	Anti-QKI antibody [EPR7306]
Description	Rabbit monoclonal [EPR7306] to QKI
Host species	Rabbit
Tested applications	Suitable for: WB, IP, ICC/IF Unsuitable for: Flow Cyt
Species reactivity	Reacts with: Mouse, Human
Immunogen	Synthetic peptide within Human QKI aa 250 to the C-terminus. The exact sequence is proprietary. Database link: Q96PU8
Positive control	WB: HAP1, Neuro 2a, HeLa and K562 whole cell lysates. IP: HeLa whole cell lysate. ICC/IF: Neuro-2a cells.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Dissociation constant (K _D)	K _D = 4.30 x 10 ⁻¹¹ M



Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR7306
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab126742 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

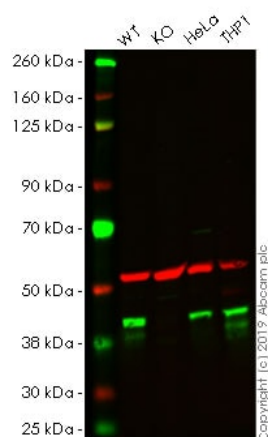
Application	Abreviews	Notes
WB	★★★★★ (2)	1/1000 - 1/10000. Detects a band of approximately 38 kDa (predicted molecular weight: 37 kDa).
IP		1/10 - 1/100.
ICC/IF		1/50 - 1/100.

Application notes Is unsuitable for Flow Cyt.

Target

Function	RNA-binding protein that plays a central role in myelination (PubMed:16641098). Binds to the 5'-NACUAAAY-N(1,20)-UAAAY-3' RNA core sequence. Regulates target mRNA stability (PubMed:23630077). In addition, acts by regulating pre-mRNA splicing, mRNA export 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 (PubMed:16641098). 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.
Tissue specificity	Expressed in the frontal cortex of brain. Down-regulated in the brain of schizophrenic patients.
Sequence similarities	Contains 1 KH domain.
Domain	The KH domain and the Qua2 region are involved in RNA binding.
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.
Cellular localization	Nucleus. Cytoplasm.

Images



Western blot - Anti-QKI antibody [EPR7306]
(ab126742)

All lanes : Anti-QKI antibody [EPR7306] (ab126742) at 1/1000 dilution

Lane 1 : Wild-type HAP1 whole cell lysate

Lane 2 : QKI knockout HAP1 whole cell lysate

Lane 3 : HeLa whole cell lysate

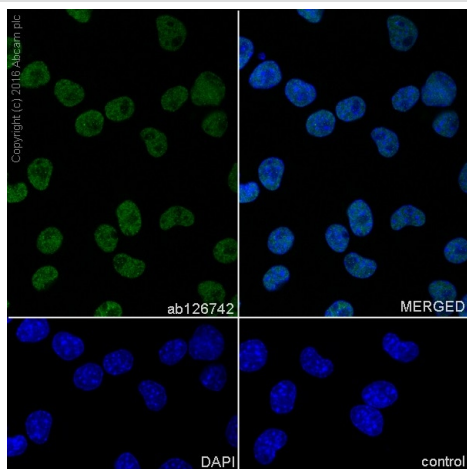
Lane 4 : THP-1 whole cell lysate

Lysates/proteins at 20 µg per lane.

Predicted band size: 37 kDa

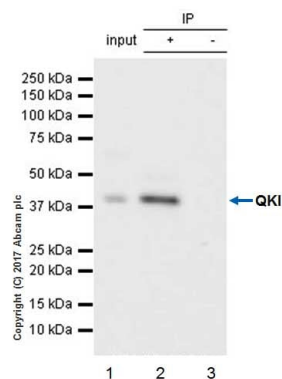
Lanes 1 - 4: Merged signal (red and green). Green - ab126742 observed at 37 kDa. Red - loading control, **ab7291**, observed at 50 kDa.

ab126742 was shown to specifically react with in wild-type HAP1 cells as signal was lost in QKI knockout cells. Wild-type and QKI knockout samples were subjected to SDS-PAGE. The membrane was blocked with 3% NF Milk. ab126742 and **ab7291** (Mouse anti Tubulin loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed **ab216773** and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed **ab216776** secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



Immunocytochemistry/ Immunofluorescence - Anti-QKI antibody [EPR7306] (ab126742)

Immunocytochemistry/ Immunofluorescence analysis of Neuro-2a (Mouse neuroblastoma neuroblast) cells labeling QKI with Purified ab126742 at 1:100 dilution (5.6µg/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Ab150077 Goat anti rabbit IgG(Alexa Fluor® 488) was used as the secondary antibody at 1:1000 dilution. DAPI nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Immunoprecipitation - Anti-QKI antibody [EPR7306]
(ab126742)

ab126742 (purified) at 1:30 dilution (2µg) immunoprecipitating QKI in HeLa whole cell lysate.

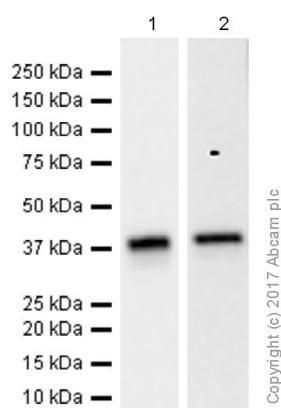
Lane 1 (input): HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate 10µg

Lane 2 (+): ab126742 & HeLa whole cell lysate

Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of ab126742 in HeLa whole cell lysate

For western blotting, VeriBlot for IP Detection Reagent (HRP) (**ab131366**) was used for detection at 1:1000 dilution.

Blocking and diluting buffer: 5% NFDM/TBST.



Western blot - Anti-QKI antibody [EPR7306]
(ab126742)

All lanes : Anti-QKI antibody [EPR7306] (ab126742) at 1/2000 dilution (purified)

Lane 1 : HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

Lane 2 : Neuro-2a (Mouse neuroblastoma neuroblast) whole cell lysates

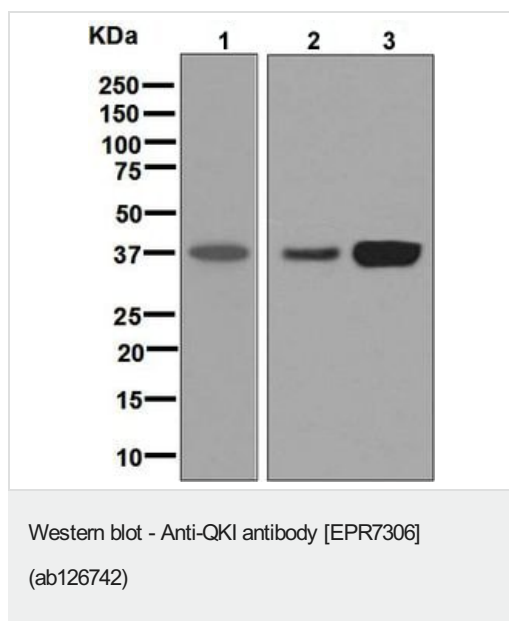
Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 37 kDa

Blocking and diluting buffer : 5% NFDM/TBST



All lanes : Anti-QKI antibody [EPR7306] (ab126742) at 1/1000 dilution (unpurified)

Lane 1 : Neuro 2a cell lysate

Lane 2 : HeLa cell lysate

Lane 3 : K562 cell lysate

Lysates/proteins at 10 µg per lane.

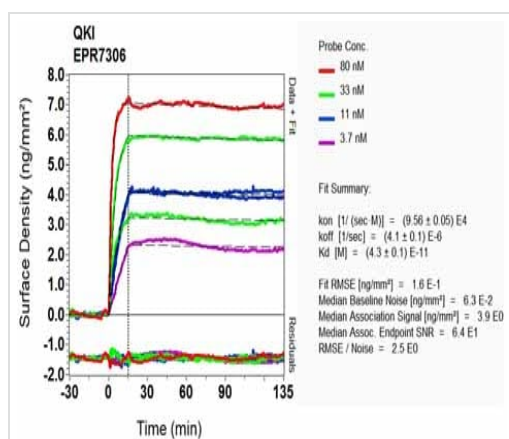
Secondary

All lanes : Goat-anti-rabbit HRP at 1/2000 dilution

Developed using the ECL technique.

Predicted band size: 37 kDa

Observed band size: 38 kDa



OL-RD Scanning - Anti-QKI antibody [EPR7306]

(ab126742)

Equilibrium dissociation constant (K_D)

Learn more about K_D

[Click here to learn more about \$K_D\$](#)

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-QKI antibody [EPR7306] (ab126742)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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