


## Product datasheet

# Anti-CDKL5 antibody ab22453

★★★★★ [1 Abreviews](#) [5 References](#) [1 Image](#)

### Overview

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<b>Product name</b>	Anti-CDKL5 antibody
<b>Description</b>	Rabbit polyclonal to CDKL5
<b>Host species</b>	Rabbit
<b>Specificity</b>	Swissprot predicts mouse CDKL5 protein to be ~105 kDa (Q3UTQ8), however a recent paper by Lin et al, 2006 (PMID: 16330482) indicated CDKL5 to run at ~118 kDa on WB. On this basis we think that the ~120 kDa band we observe using Rabbit polyclonal to CDKL5 (ab22453) on mouse tissue is CDKL5 specific. Furthermore the ~120 kDa band is blocked by the immunising peptide. The larger ~200 kDa is potentially also CDKL5 as a similar band is also observed in the Lin et al (2006) publication. There is evidence for larger forms of CDKL5 for the human version of the protein, so it may not be surprising to find a similar scenario for the mouse protein.
<b>Tested applications</b>	<b>Suitable for:</b> WB
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse <b>Predicted to work with:</b> Human 
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>General notes</b>	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

### Properties

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<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: PBS

Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising

agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.

<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

## Applications

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**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab22453 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
<b>WB</b>		Use a concentration of 1 - 3 µg/ml. Detects a band of approximately 120,160 kDa (predicted molecular weight: 105 kDa).

## Target

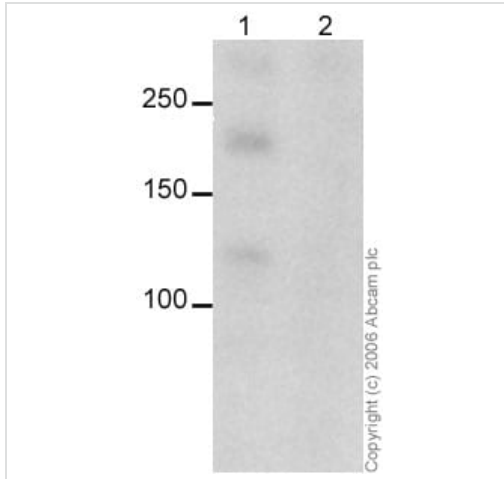
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<b>Function</b>	Mediates phosphorylation of MECP2.
<b>Tissue specificity</b>	Expressed in brain, lung, kidney, prostate, ovary, placenta, pancreas and testis.
<b>Involvement in disease</b>	Note=Chromosomal aberrations involving CDKL5 are found in patients manifesting early-onset seizures and spasms and psychomotor impairment. Translocation t(X;6)(p22.3;q14); translocation t(X;7)(p22.3;p15). Defects in CDKL5 are a cause of epileptic encephalopathy early infantile type 2 (EIEE2) [MIM:300672]; also known as atypical CDKL5-related Rett syndrome. EIEE2 is a severe form of epilepsy characterized by seizures or spasms beginning in infancy. Patients manifest features resembling Rett syndrome such as microcephaly, lack of speech development, stereotypic hand movements.
<b>Sequence similarities</b>	Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. CDC2/CDKX subfamily. Contains 1 protein kinase domain.
<b>Post-translational modifications</b>	Autophosphorylated.
<b>Cellular localization</b>	Nucleus.

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## Images

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Western blot - Anti-CDKL5 antibody (ab22453)

This image is courtesy of Chris Anderson, Wellcome Trust Sanger Institute, United Kingdom

**All lanes :** Anti-CDKL5 antibody (ab22453) at 3 µg/ml

**Lane 1 :** mouse cortex

**Lane 2 :** mouse cortex with Human CDKL5 peptide (**ab25756**) at 2 µg/ml

Lysates/proteins at 20 µg per lane.

**Predicted band size:** 105 kDa

**Observed band size:** 120,200 kDa

**Exposure time:** 10 minutes

Swissprot predicts mouse CDKL5 protein to be ~105kDa (Q3UTQ8), however a recent paper by Lin et al, 2006 (PMID: 16330482) indicated CDKL5 to run at ~118kDa on WB. On this basis we think that the ~120kDa band we observe using Rabbit polyclonal to CDKL5 (ab22453) on mouse tissue is CDKL5 specific. Furthermore the ~120kDa band is blocked by the immunising peptide. The larger >150kDa is potentially also CDKL5 as a similar band is also observed in the Lin et al (2006) publication. There is evidence for larger forms of CDKL5 for the human version of the protein, so it may not be surprising to find a similar scenario for the mouse protein.

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

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