

# CDK5 Antibody Cocktail

Product Details	
Size	500 µL
Species Reactivity	Human, Mouse, Rat
Published Species	Rat, Human, Mouse
Host/Isotope	Mouse / IgG1
Class	Cocktail
Type	Antibody
Clone	DC17 + DC34
Conjugate	Unconjugated
Immunogen	Recombinant cdk5 protein
Form	Liquid
Concentration	0.2 mg/mL
Purification	Protein G
Storage buffer	PBS, pH 7.4, with 0.2% BSA
Contains	0.09% sodium azide
Storage Conditions	4° C
RRID	AB_10979358

Applications	Tested Dilution	Publications
Immunocytochemistry (ICC)	Assay Dependent	1 Publication
Immunofluorescence (IF)	Assay Dependent	-
Immunoprecipitation (IP)	6 µg/mg protein lysate	-
Western Blot (WB)	1-2 µg/mL	3 Publications

## Product Specific Information

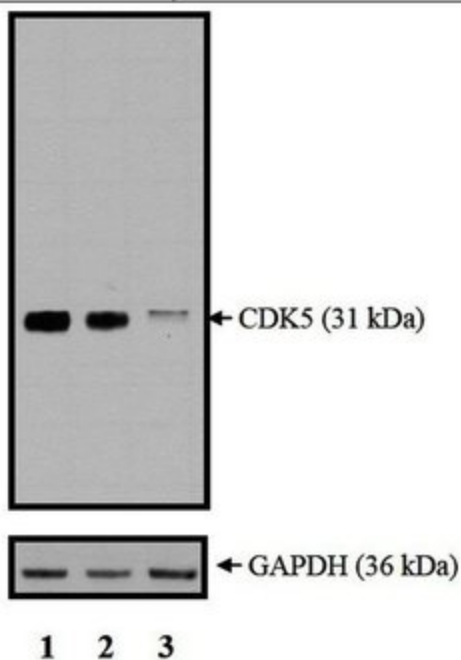
MA5-11291 targets Cdk5 in IF, IP, and WB applications and shows reactivity with Human, mouse, and Rat samples.

The MA5-11291 immunogen is recombinant cdk5 protein.

## Advanced Verification Data

### CDK5 Antibody (MA5-11291)

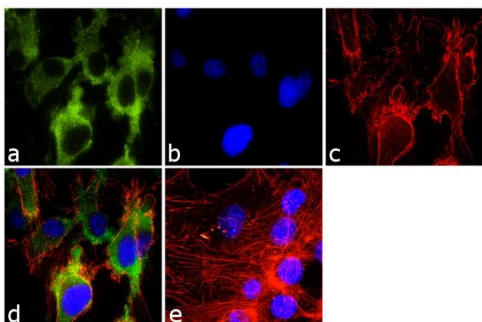
Antibody specificity was demonstrated by siRNA mediated knockdown of target protein. HeLa cells were transfected with CDK5 siRNA and decrease in signal intensity was observed in western blot application using anti-CDK5 monoclonal Antibody (Product # MA5-11291). Densitometric analysis of this western blot is shown in histogram (Fig b). Knockdown validation info.



## Product Images For CDK5 Antibody Cocktail

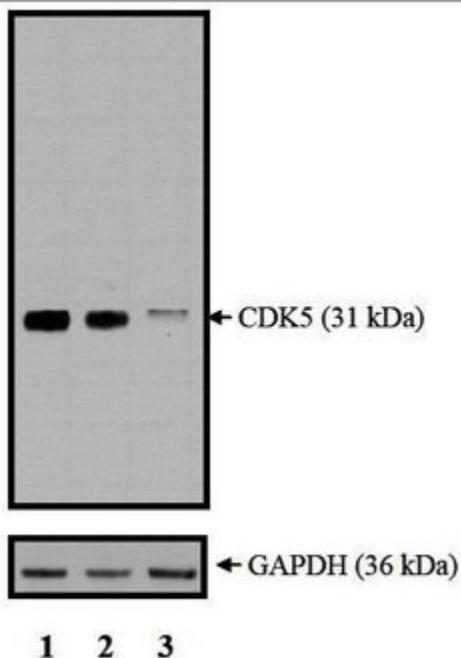
### CDK5 Antibody (MA5-11291) in IF

Immunofluorescence analysis of Cdk5 was done on 70% confluent log phase MCF-7 cells. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 10 minutes, and blocked with 1% BSA for 1 hour at room temperature. The cells were labeled with Cdk5 (DC17 + DC34) Mouse Monoclonal Antibody (Product # MA5-11291) at 2 µg/mL in 0.1% BSA and incubated for 3 hours at room temperature and then labeled with Goat anti-Mouse IgG (H+L) Superclone™ Secondary Antibody, Alexa Fluor® 488 conjugate (Product # A28175) at a dilution of 1:2000 for 45 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with SlowFade® Gold Antifade Mountant with DAPI (Product # S36938). F-actin (Panel c: red) was stained with Alexa Fluor® 555 Rhodamine Phalloidin (Product # R415, 1:300). Panel d is a merged image showing cytoplasmic localization. Panel e is a no primary antibody control. The images were captured at 60X magnification.



### CDK5 Antibody (MA5-11291) in WB

Western blot analysis of CDK5 was performed with 10 µg of HeLa cells transfected with Transfection Reagent alone (Lane 1), 100nM Non-Targeting control siRNA (Lane 2), or 100nM siRNA against CDK5 (Lane 3). Proteins were resolved using a NuPAGE® Novex 4-12% Bis-Tris Gel (Product # NP0322BOX), XCell SureLock™ Electrophoresis System (Product # EI0002), and a protein size ladder. Proteins were wet transferred to a Pierce Nitrocellulose Membrane (Product # 88025) OR Pierce PVDF Membrane (Product # 88518) and blocked with Pierce Starting Block T20 (PBS) Blocking Buffer (Product # 37539) for 1 hour at room temperature. CDK5 was detected at ~ 31 kDa using CDK5 Mouse monoclonal antibody (Product # MA5-11291) diluted in Pierce Starting Block T20 (PBS) Blocking Buffer 4°C overnight on a rocking platform. Pierce Goat Anti-Mouse (Product # 31437) HRP-Conjugated Antibodies at a 1:2500 dilution were used and chemiluminescent detection was performed using Pierce Supersignal West Dura Maximum Sensitivity Substrate (Product # 37071). Relative density of the bands normalized to GAPDH (36 kDa). CDK5 Antibody (Product # MA5-11291) confirms silencing of CDK5 expression.



[View more figures on thermofisher.com](https://www.thermofisher.com)

## 4 References

### Western Blot (3)

The international journal of neuropsychopharmacology

#### Cyclin-dependent kinase-5 and p35/p25 activators in schizophrenia and major depression prefrontal cortex: basal contents and effects of psychotropic medications.

"MA5-11291 was used in western blot to study the expression of CDK5, p35 and p25 in the prefrontal cortex of individuals with schizophrenia or major depression"

Authors: Ramos-Miguel A, Meana JJ, García-Sevilla JA

**Species**  
Human

**Dilution**  
1:5000

**Year**  
2013

Neuroscience

#### Crosstalk between cdk5 and MEK-ERK signalling upon opioid receptor stimulation leads to upregulation of activator p25 and MEK1 inhibition in rat brain.

"MA5-11291 was used in western blot to study the mechanism by which opioid receptor stimulation leads to upregulation of activator p25 and MEK1 inhibition in rat brain"

Authors: Ramos-Miguel A, García-Sevilla JA

**Species**  
Rat

**Dilution**  
Not Cited

**Year**  
2012

[View more WB references on thermofisher.com](#)

### Immunocytochemistry (1)

Journal of Alzheimer's disease : JAD

#### (+/-)-huprine Y, (-)-huperzine A and tacrine do not show neuroprotective properties in an apoptotic model of neuronal cytoskeletal alteration.

"MA5-11291 was used in immunocytochemistry to study the effect of acetylcholinesterase inhibitors in colchicine-induced apoptosis in cerebellar granule neurons"

Authors: Jordá EG, Verdaguer E, Jiménez A, Canudas AM, Rimbau V, Camps P, Muñoz-Torrero D, Camins A, Pallàs M

**Species**  
Rat

**Dilution**  
1:1000

**Year**  
2004

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON-INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.