

For Research Use Only

# CUX1 Polyclonal antibody

Catalog Number: 11733-1-AP

Featured Product

73 Publications



## Basic Information

### Catalog Number:

11733-1-AP

### Size:

150ul, Concentration: 1000 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG2335

### GenBank Accession Number:

BC025422

### GeneID (NCBI):

1523

### UNIPROT ID:

Q13948

### Full Name:

cut-like homeobox 1

### Calculated MW:

676 aa, 77 kDa

### Observed MW:

80 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:2000-1:16000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC 1:1000-1:4000

IF/ICC 1:200-1:800

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

### Cited Applications:

WB, IHC, IF, IP

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat, sheep

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

**WB:** Jurkat cells, human brain tissue, human liver tissue, mouse liver tissue, rat brain tissue, mouse brain tissue, L02 cells, rat liver tissue

**IP:** mouse brain tissue,

**IHC:** mouse brain tissue,

**IF/ICC:** SH-SY5Y cells,

## Background Information

CUX1 is a transcription factor that regulates a large number of genes and microRNAs involved in multiple cellular processes, such as DNA replication, progression into S phase and later, the spindle assembly checkpoint that controls progression through mitosis. Cux1, a marker of supragranular layers. CUX1 acts by preventing binding of positively-acting CCAAT factors to promoters to mediate its gene repression. Also it's a component of nf-munr repressor, and binds to the matrix attachment regions (MARs) (5' and 3') of the immunoglobulin heavy chain enhancer. It can represses T-cell receptor (TCR) beta enhancer function by binding to MARbeta, an ATC-rich DNA sequence located upstream of the TCR beta enhancer. CUX1 protein containing three cut repeats and a homeodomain called p200, there are several truncated isoforms that have been identified. These isoforms include a testis-specific isoform containing one cut repeat and the homeodomain called p55. In situ hybridization showed that mRNA for p55 was most abundant in round spermatids. Additional isoforms include p75, a protein similar in structure to p55, derived from the use of an alternate promoter in intron 20; the cut alternately spliced protein (CASP), a Golgi protein that contains amino-terminal sequences but none of the cut repeats or homeodomains; and several other isoforms (p80, p90, p110, and p150) that appear to arise via proteolytic processing. This antibody can recognize full-length p200 Cux1 and CASP protein (70-80kDa).

## Notable Publications

Author	Pubmed ID	Journal	Application
Dörthe Holdhof	31504276	Cereb Cortex	
Ji-Wei Liu	36313621	Front Cell Neurosci	IHC
Patrizia Bossolasco	36220610	Neurobiol Dis	IF

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

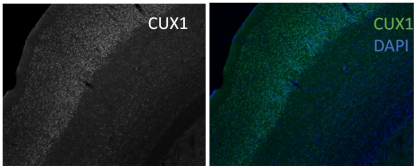
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

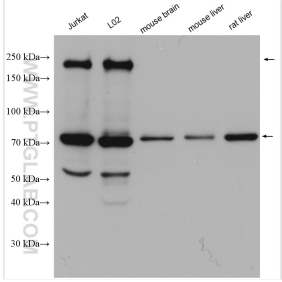
This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

Selected Validation Data

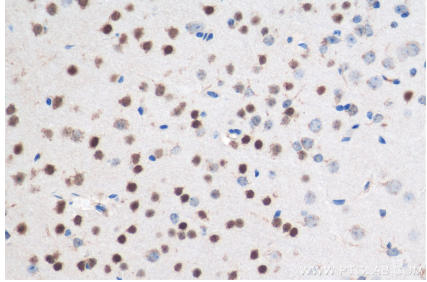


**Adult mouse Cortex 10x**  
Formalin-fixed. CUX-1 used at 1:300 dilution overnight in TBS buffer, 5% NDS, 1% BSA, .25% Triton-X Donkey anti Rabbit 488 used at 1:500 for 2 hours

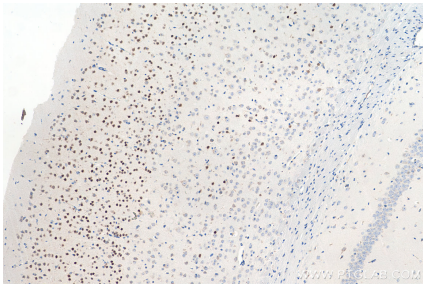
IF result of the antibody CUX1 (11733-1-AP, 1:300) with mouse cortex, Data from Dr. Lee O. Vaasjo Muñoz, University of Chicago. .



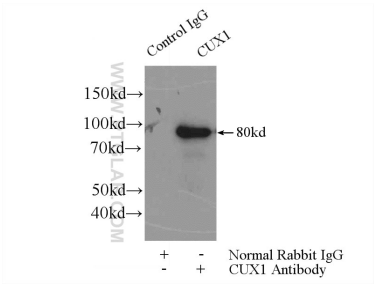
Various lysates were subjected to SDS PAGE followed by western blot with 11733-1-AP (CUX1 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



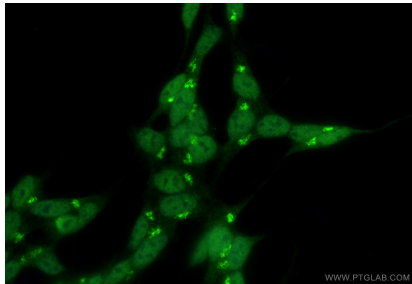
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 11733-1-AP (CUX1 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 11733-1-AP (CUX1 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-CUX1 (IP:11733-1-AP, 4ug; Detection:11733-1-AP 1:1000) with mouse brain tissue lysate 4000ug.



Immunofluorescent analysis of (4% PFA) fixed SH-SY5Y cells using CUX1 antibody (11733-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).