

For Research Use Only

# VMAT2 Polyclonal antibody

Catalog Number: 20873-1-AP

Featured Product

10 Publications



## Basic Information

### Catalog Number:

20873-1-AP

### Concentration:

450 µg/ml

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG14971

### GenBank Accession Number:

BC108928

### GeneID (NCBI):

6571

### UNIPROT ID:

Q05940

### Full Name:

solute carrier family 18 (vesicular monoamine), member 2

### Calculated MW:

514 aa, 56 kDa

### Observed MW:

45-55 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB: 1:500-1:1000

IHC: 1:200-1:800

IF-P: 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IF-P, ELISA

### Cited Applications:

WB, IHC, IF

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat

### Positive Controls:

WB : SGC-7901 cells, Jurkat cells

IHC : mouse brain tissue, rat brain tissue

IF-P : mouse brain tissue,

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

## Background Information

VMAT2 is a vesicular monoamine transporter that is responsible for the uptake and storage of monoamines (dopamine, norepinephrine, epinephrine, histamine and serotonin) in neurons, endocrine cells, and tumors deriving from these cells. Histamine-producing endocrine tumors (gastric carcinoids) expressed VMAT2 almost exclusively, thus VMAT2 is useful in classification of neuroendocrine tumors. Reduced expression of VMAT2 has often been observed in Parkinson's diseased (PD) brain, and detection of VMAT2 can be used to reflect the 4-(2-aminoethyl)benzene-1,2-diol neuron loss and predict the disease process. Several forms of VMAT2 can be observed upon the glycosylation: 45 kDa band corresponds to the native (deglycosylated) form, and the 55 and 75 kDa bands to glycosylated forms (PMID: 17582657).

## Notable Publications

| Author         | Pubmed ID | Journal   | Application |
|----------------|-----------|-----------|-------------|
| Sha Li         | 30922214  | Mol Med   | IF          |
| Hao Qian       | 32581380  | Nature    | WB,IF       |
| Han-Xiang Deng | 27270108  | Nat Genet | 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

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

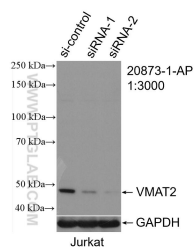
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

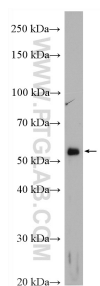
W: [ptgcn.com](http://ptgcn.com)

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

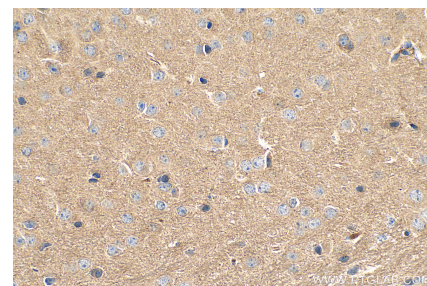
## Selected Validation Data



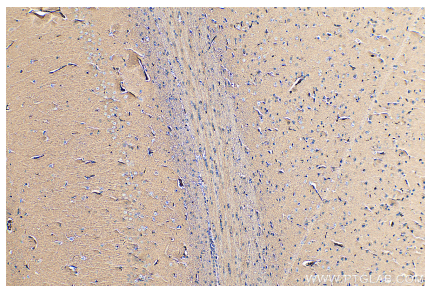
WB result of VMAT2 antibody (20873-1-AP; 1:3000; incubated at room temperature for 1.5 hours) with sh-Control and sh-VMAT2 transfected Jurkat cells.



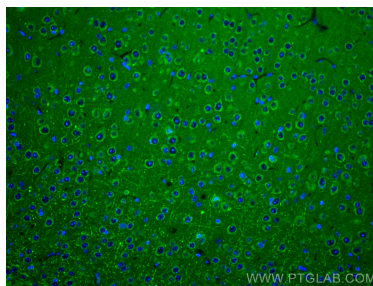
SGC-7901 cells were subjected to SDS PAGE followed by western blot with 20873-1-AP (VMAT2 antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 20873-1-AP (VMAT2 antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded rat brain tissue slide using 20873-1-AP (VMAT2 antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using VMAT2 antibody (20873-1-AP) at dilution of 1:200 and Coralite®488-Conjugated Goat Anti-Rabbit IgG(H+L).