

For Research Use Only

# COMT Polyclonal antibody

Catalog Number: 14754-1-AP

13 Publications



## Basic Information

### Catalog Number:

14754-1-AP

### Size:

150ul, Concentration: 500 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG6502

### GenBank Accession Number:

BC000419

### GeneID (NCBI):

1312

### UNIPROT ID:

P21964

### Full Name:

catechol-O-methyltransferase

### Calculated MW:

30 kDa

### Observed MW:

28-30 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:1000-1:4000

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

IHC 1:100-1:800

IF-P 1:50-1:500

IF/ICC 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IF-P, FC (Intra), IP, ELISA

### Cited Applications:

WB, IHC, IF

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat, monkey

**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: HEK-293 cells, K-562 cells, human placenta, mouse liver, rat liver

IP: K-562 cells,

IHC: human liver tissue, human placenta tissue, mouse lung tissue

IF-P: mouse cerebellum tissue,

IF/ICC: HepG2 cells,

## Background Information

Catechol O-methyltransferase (COMT) is an important enzyme that catalyzes O-methylation and inactivation of metabolically active catechol-containing bioactive molecules and drugs. The mammalian COMT enzyme exists in soluble form (24-26 kDa) and membrane-bound form (28-30 kDa), which are encoded by a single gene utilizing different promoters.

## Notable Publications

Author	Pubmed ID	Journal	Application
Adedamola Bayo-Olugbami	32912107	Nutr Neurosci	WB
Yonglong Zhou	34725639	Biomed Res Int	WB,IF
Yinrui Guo	34045460	Transl Psychiatry	WB

## Storage

### Storage:

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

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol

Aliquoting is unnecessary for -20°C storage

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

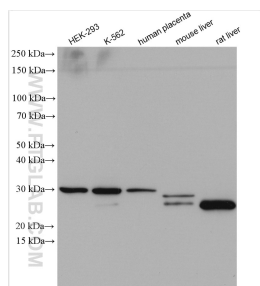
For technical support and original validation data for this product please contact:

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

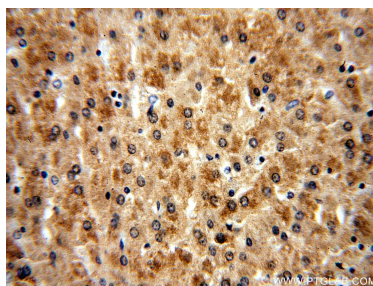
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

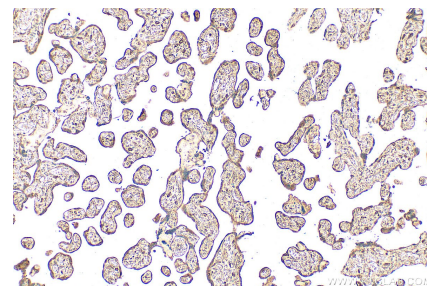
## Selected Validation Data



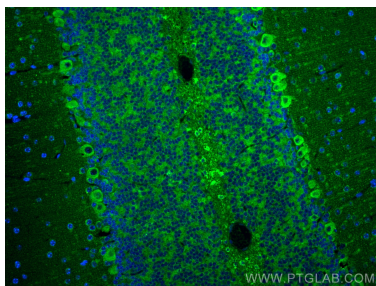
Various lysates were subjected to SDS PAGE followed by western blot with 14754-1-AP (COMT antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



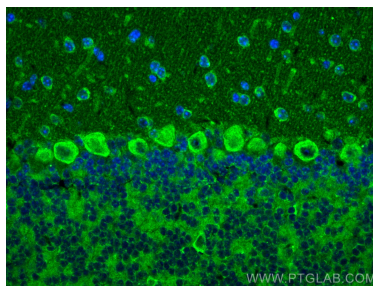
Immunohistochemical analysis of paraffin-embedded human liver using 14754-1-AP (COMT antibody) at dilution of 1:100 (under 40x lens).



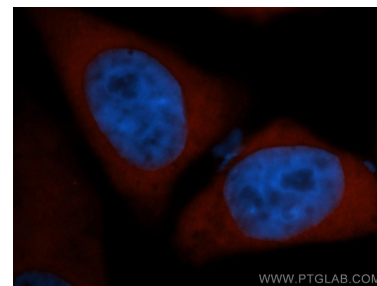
Immunohistochemical analysis of paraffin-embedded human placenta tissue slide using 14754-1-AP (COMT antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



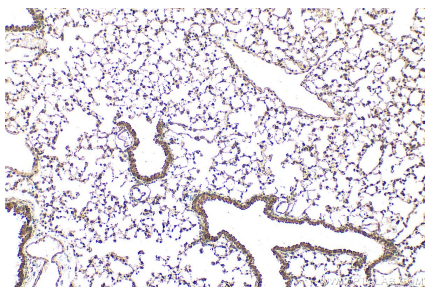
Immunofluorescent analysis of (4% PFA) fixed mouse cerebellum tissue using COMT antibody (14754-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



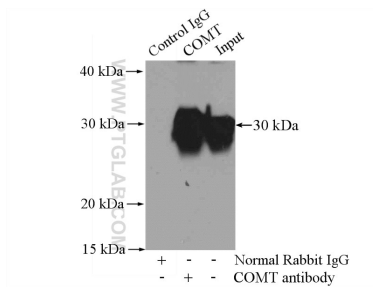
Immunofluorescent analysis of (4% PFA) fixed mouse cerebellum tissue using COMT antibody (14754-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



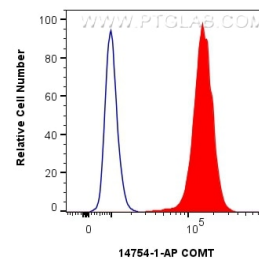
Immunofluorescent analysis of HepG2 cells, using COMT antibody 14754-1-AP at 1:50 dilution and Rhodamine-labeled goat anti-rabbit IgG (red). Blue pseudocolor = DAPI (fluorescent DNA dye).



Immunohistochemical analysis of paraffin-embedded mouse lung tissue slide using 14754-1-AP (COMT antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-COMT (IP:14754-1-AP, 4ug; Detection:14754-1-AP 1:500) with K-562 cells lysate 1200ug.



1x10<sup>6</sup> PC-3 cells were intracellularly stained with 0.8 ug COMT Polyclonal antibody (14754-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.8 ug Rabbit IgG control Rabbit PolyAb (30000-0-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).