For Research Use Only

COMT Polyclonal antibody

Catalog Number: 14754-1-AP 13 Publications



Basic Information

Applications

Catalog Number: GenBank Accession Number: 14754-1-AP BC000419

GeneID (NCBI): Concentration:

500 ug/ml 1312

UNIPROT ID: Source: Rabbit P21964 Full Name: Isotype:

catechol-O-methyltransferase

Calculated MW: Immunogen Catalog Number:

AG6502 30 kDa

Observed MW: 28-30 kDa

Positive Controls:

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

Cited Applications: WB, IHC, IF

Tested Applications:

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

WB: HEK-293 cells, K-562 cells, human placenta,

Purification Method:

WB 1:1000-1:4000

protein lysate

IHC 1:100-1:800

IF-P 1:50-1:500

IF/ICC 1:50-1:500

Antigen affinity purification

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

Recommended Dilutions:

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

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

Storage Buffer

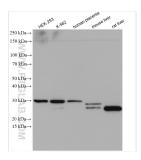
PBS with 0.02% sodium azide and 50% glycerol Aliquoting is unnecessary for -20°C storage

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

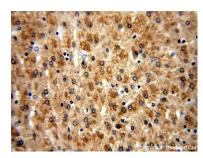
T: 4006900926 E: Proteintech-CN@ptglab.com

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

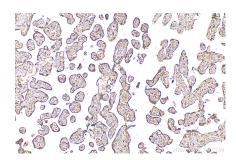
Selected Validation Data



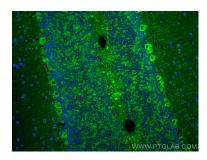
Various lysates were subjected to SDS PAGE followed by western blot with 14754-1-AP (COMT antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



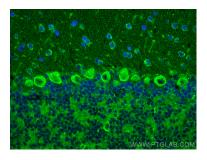
Immunohistochemical analysis of paraffinembedded human liver using 14754-1-AP (COMT antibody) at dilution of 1:100 (under 40x lens).



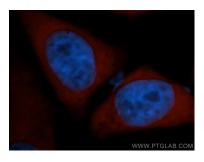
Immunohistochemical analysis of paraffinembedded human placenta tissue slide using 14754-1-AP (COMT antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



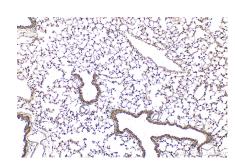
Immunofluorescent analysis of (4% PFA) fixed mouse cerebellum tissue using COMT antibody (14754-1-AP) at dilution of 1:200 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



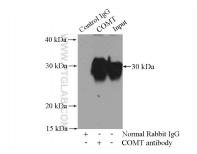
Immunofluorescent analysis of (4% PFA) fixed mouse cerebellum tissue using COMT antibody (14754-1-AP) at dilution of 1:200 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



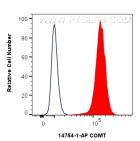
Immunofluorescent analysis of HepG2 cells, using COMT antibody 14754-1-AP at 1:50 dilution and Rhodamine-labeled goat anti-rabbit IgG (red). Blue pseudocolor = DAPI (fluorescent DNA dye).



Immunohistochemical analysis of paraffinembedded 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.



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