For Research Use Only

COMT Polyclonal antibody

Catalog Number: 14754-1-AP

11 Publications



Basic Information

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

ze: GeneID (NCBI):

150ul , Concentration: 500 µg/ml by 1312

Nanodrop; Full Name

Source: catechol-O-methyltransferase

Rabbit Calculated MW:
Isotype: 30 kDa
IgG Observed MW:
Immunogen Catalog Number: 28-30 kDa

AG6502

Antigen affinity purification
Recommended Dilutions:
WB 1:1000-1:4000

Purification Method:

IP 0.5-4.0 ug for IP and 1:500-1:1000

for WB IHC 1:20-1:200 IF 1:50-1:500

Applications

Tested Applications:

FC, IF, IHC, IP, WB, ELISA

Cited Applications:

IF, IHC, WB

Species Specificity:

human, mouse, rat Cited Species:

human, mouse, rat

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,

IF: mouse cerebellum tissue, 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.

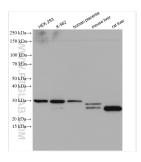
Storage Buffer

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

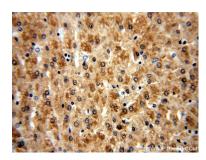
Selected Validation Data



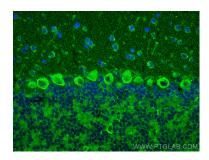
Various lysates were subjected to SDS PAGE followed by western blot with 14754-1-AP (COMT antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours.



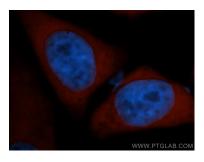
Immunohistochemical analysis of paraffinembedded human liver using 14754-1-AP (COMT antibody) at dilution of 1:100 (under 10x lens).



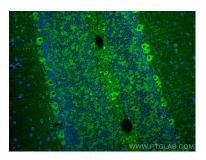
Immunohistochemical analysis of paraffinembedded human liver using 14754-1-AP (COMT antibody) at dilution of 1:100 (under 40x lens).



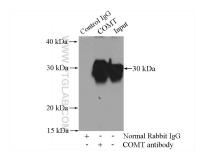
Immunofluorescent analysis of (4% PFA) fixed mouse cerebellum tissue using COMT antibody (14754-1-AP) at dilution of 1:200 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



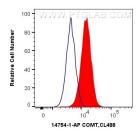
Immunofluorescent analysis of HepG2 cells, using COMT antibody 14754-1-AP at 1:50 dilution and Rhodamine-labeled goat anti-rabbit IgG (red). Blue pseudocolor = DAPI (fluorescent DNA dye).



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).



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



1X10^6 HepG2 cells were intracellularly stained with 0.4 ug Anti-Human COMT (14754-1-AP) and Coralite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dlution 1:1000 (red), or 0.4 ug Isotype Control. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).