


Product datasheet

Anti-COMT antibody [EPR6491(B)] ab124813

KO VALIDATED Recombinant RabMAB

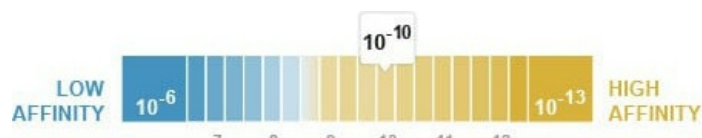
6 Images

Overview

Product name	Anti-COMT antibody [EPR6491(B)]
Description	Rabbit monoclonal [EPR6491(B)] to COMT
Host species	Rabbit
Tested applications	Suitable for: WB, Flow Cyt Unsuitable for: ICC/IF, IHC-P or IP
Species reactivity	Reacts with: Human Predicted to work with: Rat 
Immunogen	Synthetic peptide within Human COMT aa 250-350. The exact sequence is proprietary.
Positive control	WB: HEK-293T, HAP1, A431 and MOLT4 cell lysates; Human fetal liver lysate. Flow Cyt: A431 cells.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAB[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAB[®] patents.</p> <p>Mouse: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
Dissociation constant (K_D)	K _D = 1.01 x 10 ⁻¹⁰ M



[Learn more about K_D](#)

Storage buffer	pH: 7.2 Preservative: 0.05% Sodium azide Constituents: 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR6491(B)
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab124813 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

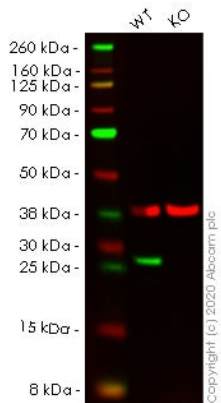
Application	Abreviews	Notes
WB		1/1000 - 1/10000. Detects a band of approximately 24-30 kDa (predicted molecular weight: 30 kDa).
Flow Cyt		1/10 - 1/100. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Application notes Is unsuitable for ICC/IF, IHC-P or IP.

Target

Function	Catalyzes the O-methylation, and thereby the inactivation, of catecholamine neurotransmitters and catechol hormones. Also shortens the biological half-lives of certain neuroactive drugs, like L-DOPA, alpha-methyl DOPA and isoproterenol.
Tissue specificity	Brain, liver, placenta, lymphocytes and erythrocytes.
Sequence similarities	Belongs to the mammalian catechol-O-methyltransferase family.
Post-translational modifications	The N-terminus is blocked.
Cellular localization	Cytoplasm and Cell membrane.

Images



Western blot - Anti-COMT antibody [EPR6491(B)]
(ab124813)

All lanes : Anti-COMT antibody [EPR6491(B)] (ab124813) at 1/1000 dilution

Lane 1 : Wild-type HEK-293T cell lysate

Lane 2 : COMT knockout HEK-293T cell lysate

Lysates/proteins at 20 µg per lane.

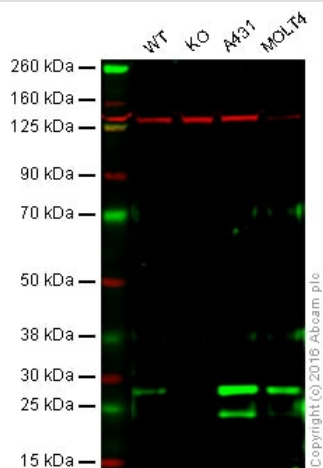
Performed under reducing conditions.

Predicted band size: 30 kDa

Observed band size: 28 kDa

Lanes 1-2: Merged signal (red and green). Green - ab124813 observed at 28 kDa. Red - loading control **ab8245** observed at 37 kDa.

ab124813 Anti-COMT antibody [EPR6491(B)] was shown to specifically react with COMT in wild-type HEK-293T cells. Loss of signal was observed when knockout cell line **ab266537** (knockout cell lysate **ab257396**) was used. Wild-type and COMT knockout samples were subjected to SDS-PAGE. ab124813 and Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) were incubated overnight at 4°C at 1 in 1000 Dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-COMT antibody [EPR6491(B)] (ab124813)

All lanes : Anti-COMT antibody [EPR6491(B)] (ab124813) at 1/1000 dilution

Lane 1 : Wild-type HAP1 whole cell lysate

Lane 2 : COMT knockout HAP1 whole cell lysate

Lane 3 : A431 whole cell lysate

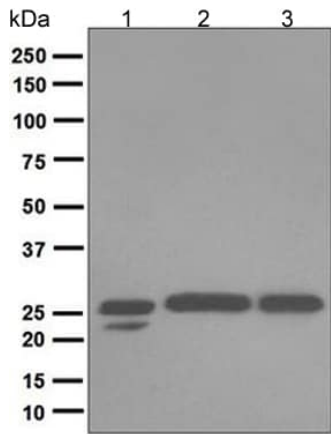
Lane 4 : MOLT4 whole cell lysate

Lysates/proteins at 20 µg per lane.

Predicted band size: 30 kDa

Lanes 1 - 4: Merged signal (red and green). Green - ab124813 observed at 28 kDa. Red - loading control, **ab18058**, observed at 130 kDa.

ab124813 was shown to recognize COMT when COMT knockout samples were used, along with additional cross-reactive bands. Wild-type and COMT knockout samples were subjected to SDS-PAGE. Ab124813 and **ab18058** (Mouse anti Vinculin loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/10000 dilution respectively. Blots were developed with 800CW Goat anti Rabbit and 680CW Goat anti Mouse secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-COMT antibody [EPR6491(B)] (ab124813)

All lanes : Anti-COMT antibody [EPR6491(B)] (ab124813) at 1/1000 dilution

Lane 1 : Human fetal liver lysate

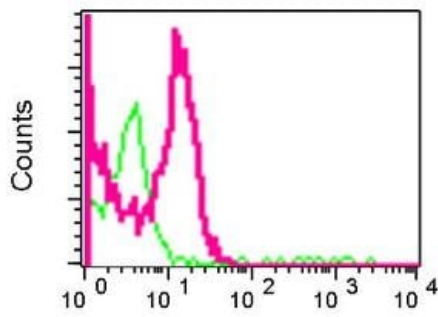
Lane 2 : A431 cell lysate

Lane 3 : MOLT4 cell lysate

Lysates/proteins at 10 µg per lane.

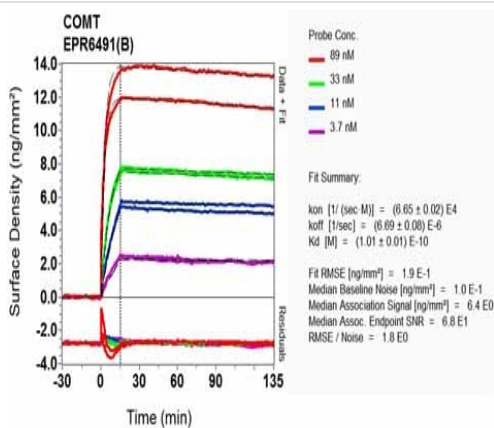
Developed using the ECL technique.

Predicted band size: 30 kDa



Flow Cytometry - Anti-COMT antibody [EPR6491(B)] (ab124813)

ab124813, at 1/10 dilution staining COMT in A431 cells, (Red) compared to a nonspecific negative control antibody (Green) by Flow Cytometry.



Ox-LD Scanning - Anti-COMT antibody [EPR6491(B)] (ab124813)

Equilibrium dissociation constant (K_D)

Learn more about K_D

[Click here to learn more about \$K_D\$](#)

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-COMT antibody [EPR6491(B)] (ab124813)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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