

CYP3A4 Polyclonal Antibody

Product Details	
Size	100 µL
Species Reactivity	Human, Mouse, Rat
Published Species	Rat, Human, Mouse
Host/Isotype	Rabbit / IgG
Class	Polyclonal
Type	Antibody
Conjugate	Unconjugated
Immunogen	Purified, His-tagged, full length human P450 3A4 fusion protein.
Form	Liquid
Purification	Ammonium sulfate precipitation
Storage buffer	PBS with 1mg/mL BSA
Contains	0.05% sodium azide
Storage Conditions	-20° C, Avoid Freeze/Thaw Cycles
RRID	AB_325821

Applications	Tested Dilution	Publications
Western Blot (WB)	1:1000-1:5000	5 Publications
Immunohistochemistry (IHC)	-	1 Publication

Product Specific Information

PA1-343 detects cytochrome P450 (P450) 3A4 from human and rat tissues and cells. This antibody detects, to a lesser extent, other P450 isoforms.

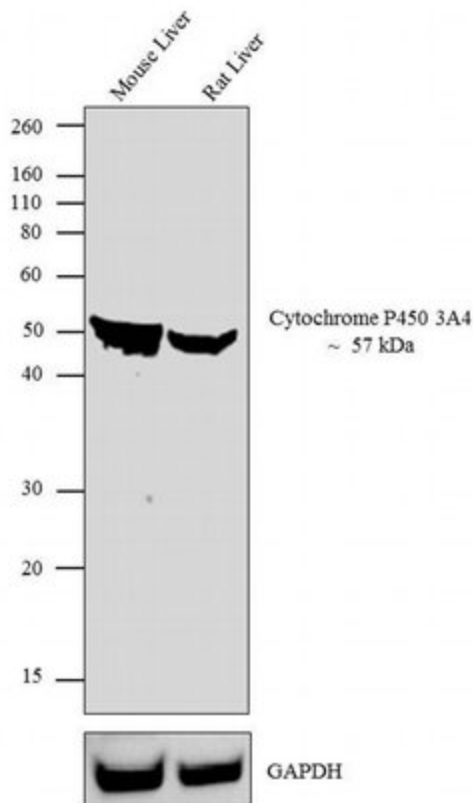
PA1-343 has been successfully used in Western blot procedures. By Western blot, this antibody detects an ~46 kDa protein representing P450 3A4 from rat liver extracts.

The PA1-343 immunogen is purified, His-tagged, full length human P450 3A4 fusion protein.

Product Images For CYP3A4 Polyclonal Antibody

CYP3A4 Antibody (PA1-343) in WB

Western blot analysis was performed on whole cell extracts (30 µg lysate) of Mouse Liver (Lane 1) and Rat Liver (Lane 2). The blots were probed with Anti-Cytochrome P450 3A4 Rabbit Polyclonal Antibody (Product # PA1-343, 1:1000-1:5000 dilution) and detected by chemiluminescence using Goat anti-Rabbit IgG (H+L) Secondary Antibody, HRP conjugate (Product # G-21234, 1:5000 dilution). A 57 kDa band corresponding to Cytochrome P450 3A4 was observed across tissues tested. Known quantity of protein samples were electrophoresed using Novex® NuPAGE® 10 % Bis-Tris gel (Product # NP0301BOX), XCell SureLock™ Electrophoresis System (Product # EI0002) and Novex® Sharp Pre-Stained Protein Standard (Product # LC5800). Resolved proteins were then transferred onto a nitrocellulose membrane with iBlot® 2 Dry Blotting System (Product # IB21001). The membrane was probed with the relevant primary and secondary Antibody following blocking with 5 % skimmed milk. Chemiluminescent detection was performed using Pierce™ ECL Western Blotting Substrate (Product # 32106).



CYP3A4 Antibody (PA1-343) in WB

Western blot was performed using Anti-CYP3A4 Polyclonal Antibody (Product # PA1-343) and a doublet around 52 kDa corresponding to CYP3A4 was observed in Mouse, Rat Liver but not in Mouse, Rat Stomach which are reported to be negative. Tissue extracts (30 µg lysate) of Mouse Liver (Lane 1), Rat Liver (Lane 2), Mouse Stomach (Lane 3) and Rat Stomach (Lane 4) were electrophoresed using NuPAGE® 4-12 % Bis-Tris gel (Product # NP0322BOX). Resolved proteins were then transferred onto a nitrocellulose membrane (Product # IB23001) by iBlot® 2 Dry Blotting System (Product # IB21001). The blot was probed with the primary antibody (1:2000 dilution) and detected by chemiluminescence with Goat anti-Rabbit IgG (H+L) Superclonal™ Recombinant Secondary Antibody, HRP (Product # A27036, 1:4000 dilution) using the iBright FL 1000 (Product # A32752). Chemiluminescent detection was performed using Novex® ECL Chemiluminescent Substrate Reagent Kit (Product # WP20005).

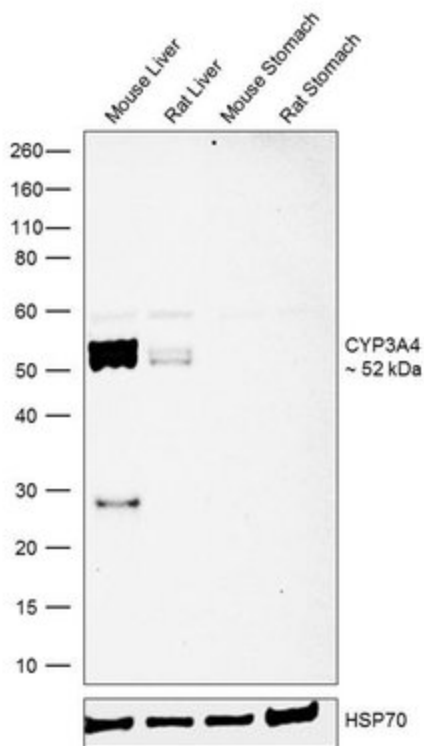


Fig. 1

CYP3A4 Antibody (PA1-343) in WB

Figure 1 illustrates Western blot detection of cytochrome P450 3A4 from rat liver extract using Product # PA1-343.



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6 References

Western Blot (5)

Acta pharmaceutica Sinica. B

The 3'-untranslated region contributes to the pregnane X receptor (PXR) expression down-regulation by PXR ligands and up-regulation by glucocorticoids.

"Published figure using CYP3A4 polyclonal antibody (Product # PA1-343) in Western Blot"

Authors: Smutny T,Dusek J,Hyrsova L,Nekvindova J,Horvatova A,Micuda S,Gerbal-Chaloin S,Pavek P

Species
Not Applicable

Dilution
Not Cited

Year
2020

American journal of physiology. Gastrointestinal and liver physiology

Hepatic Mrp4 induction following acetaminophen exposure is dependent on Kupffer cell function.

"PA1-343 was used in Western Blotting to show that Kupffer cell mediators released in response to acetaminophen are likely responsible for the induction of multidrug resistance-associated protein 4."

Authors: Campion SN,Johnson R,Aleksunes LM,Goedken MJ,van Rooijen N,Scheffer GL,Cherrington NJ,Manautou JE

Species
Mouse

Dilution
1:5,000

Year
2008

[View more WB references on thermofisher.com](#)

Immunohistochemistry (1)

Toxicologic pathology

Effects of lersivirine on canine and rodent thyroid function.

"PA1-343 was used in immunohistochemistry to study the effects of the non-nucleotide reverse transcriptase inhibitor lersivirine on thyroid function in animals"

Authors: Houle CD,Finch GL,Mauthe RJ,Potter DM,Walisser JA,Gardner IB,DeWit RH

Species
Rat

Dilution
1:3000

Year
2014

More applications with references on thermofisher.com

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