# abcam

## Product datasheet

## Anti-FMO3 antibody [EPR6968] ab126711



★★★★★ 3 Abreviews 6 References 10 Images

#### Overview

**Product name** Anti-FMO3 antibody [EPR6968]

**Description** Rabbit monoclonal [EPR6968] to FMO3

**Host species** Rabbit

**Tested applications** Suitable for: ICC/IF, WB, IHC-P Species reactivity Reacts with: Mouse, Rat, Human

**Immunogen** Synthetic peptide within Human FMO3 aa 300-400. The exact sequence is proprietary.

Database link: P31513

Positive control WB: Human fetal liver, human fetal kidney, mouse kidney, mouse liver, rat kidney and rat liver

tissue lysates. IHC-P: Human, mouse and rat liver tissues. ICC/IF: HepG2 cells.

**General notes** This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our  $\mathsf{RabMAb}^{\texttt{®}}$  technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

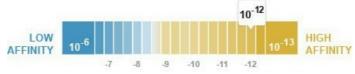
#### **Properties**

**Form** Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Stable for 12 months at -20°C.

 $K_D = 2.40 \times 10^{-12} M$ Dissociation constant (K<sub>D</sub>)



Learn more about K<sub>D</sub>

Storage buffer

pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

**Purity** Protein A purified

Clonality Monoclonal
Clone number EPR6968

**Isotype** IgG

## **Applications**

The Abpromise guarantee

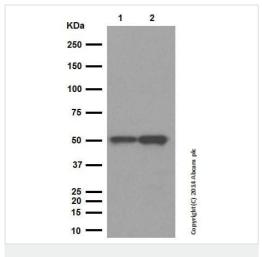
Our <u>Abpromise guarantee</u> covers the use of ab126711 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF	<b>★★★★ (1)</b>	1/150.
WB	**** <u>(2)</u>	1/5000. Detects a band of approximately 56 kDa (predicted molecular weight: 60 kDa).  For unpurified use at 1/1000 - 1/10000.
IHC-P		1/500. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.  See IHC antigen retrieval protocols.  For unpurified use at 1/500 - 1/1000.
		ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.

Target		
Function	Involved in the oxidative metabolism of a variety of xenobiotics such as drugs and pesticides. It Noxygenates primary aliphatic alkylamines as well as secondary and tertiary amines. Plays an important role in the metabolism of trimethylamine (TMA), via the production of TMA Noxide (TMAO). Is also able to perform Soxidation when acting on sulfide compounds.	
Tissue specificity	Liver.	
Involvement in disease	Defects in FMO3 are the cause of trimethylaminuria (TMAU) [MIM:602079]; also known as fishodor syndrome. TMAU is an inborn error of metabolism associated with an offensive body odor and caused by deficiency of FMO-mediated N-oxidation of amino-trimethylamine (TMA) derived from foodstuffs. Such individuals excrete relatively large amounts of TMA in their urine, sweat, and breath, and exhibit a fishy body odor characteristic of the malodorous free amine.	
Sequence similarities	Belongs to the FMO family.	
Cellular localization	Microsome membrane. Endoplasmic reticulum membrane.	

## **Images**



Western blot - Anti-FMO3 antibody [EPR6968] (ab126711)

**All lanes :** Anti-FMO3 antibody [EPR6968] (ab126711) at 1/5000 dilution (purified)

Lane 1 : Human fetal kidney tissue lysate

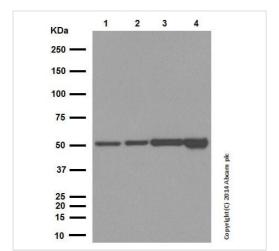
Lane 2 : Human fetal liver tissue lysate

Lysates/proteins at 20 µg per lane.

#### Secondary

**All lanes :** Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 60 kDa
Observed band size: 56 kDa



Western blot - Anti-FMO3 antibody [EPR6968] (ab126711)

Blocking and diluting buffer: 5% NFDM/TBST.

**All lanes :** Anti-FMO3 antibody [EPR6968] (ab126711) at 1/5000 dilution (purified)

Lane 1 : Mouse kidney tissue lysate
Lane 2 : Mouse liver tissue lysate
Lane 3 : Rat kidney tissue lysate

Lane 4: Rat liver tissue lysate

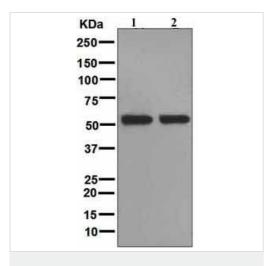
Lysates/proteins at 20 µg per lane.

#### Secondary

**All lanes :** Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 60 kDa Observed band size: 56 kDa

Blocking and diluting buffer: 5% NFDM/TBST.



Western blot - Anti-FMO3 antibody [EPR6968] (ab126711)

**All lanes :** Anti-FMO3 antibody [EPR6968] (ab126711) at 1/1000 dilution (unpurified)

Lane 1 : Human fetal liver tissue lysate

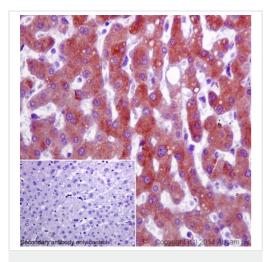
Lane 2 : Human fetal kidney tissue lysate

Lysates/proteins at 10 µg per lane.

## **Secondary**

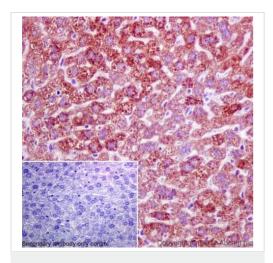
All lanes: HRP-conjugated goat anti-rabbit lgG at 1/2000 dilution

Predicted band size: 60 kDa



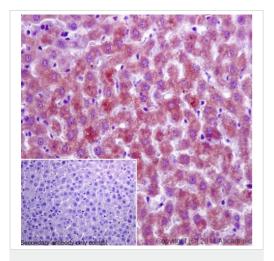
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-FMO3 antibody
[EPR6968] (ab126711)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human liver tissue labelling FMO3 with purified ab126711 at 1/500. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. <a href="mailto:ab97051">ab97051</a>, a HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.



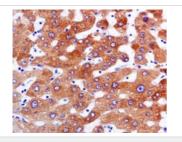
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-FMO3 antibody
[EPR6968] (ab126711)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse liver tissue labelling FMO3 with purified ab126711 at 1/500. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. <a href="mailto:ab97051">ab97051</a>, a HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-FMO3 antibody
[EPR6968] (ab126711)

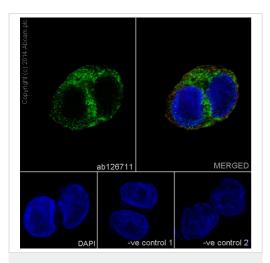
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of rat liver tissue labelling FMO3 with purified ab126711 at 1/500. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. <a href="mailto:ab97051">ab97051</a>, a HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-FMO3 antibody
[EPR6968] (ab126711)

Immunohistochemitsy (Formalin/PFA-fixed paraffin-embedded sections) analysis of human liver tissue labelling FMO3 with unpurified ab126711 at a 1/500 dilution.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-FMO3 antibody [EPR6968] (ab126711)

FMO3 Probe Conc EPR6968 \_\_\_ 80 nM 8.0 \_\_ 33 nM 7.0 Surface Density (ng/mm²) \_\_\_\_ 11 nM 6.0 \_\_\_ 3.7 nM 5.0 4.0 kon [1/ (sec-M)] =  $(8.40 \pm 0.05) E4$ koff [1/sec] = < 2.0 E-7Kd [M] = < 2.4 E-123.0 2.0 Fit RMSE [ng/mm²] = 1.5 E-1 Median Baseline Noise [ng/mm²] = 7.9 E-2 Median Association Signal [ng/mm²] = 3.2 E0 Median Assoc. Endpoint SNR = 3.5 E1 RMSE / Noise = 1.9 E0 1.0 0.0 -1.0 -2.0↓ -30 135 Time (min)

OI-RD Scanning - Anti-FMO3 antibody [EPR6968] (ab126711)

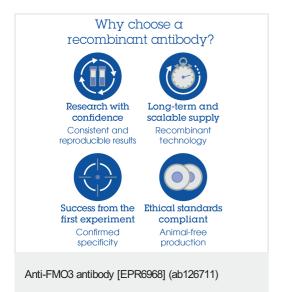
Immunocytochemistry/Immunofluorescence analysis of HepG2 cells labelling FMO3 with purified ab126711 at 1/150. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. <a href="mailto:ab150077">ab150077</a>, an Alexa Fluor<sup>®</sup> 488-conjugated goat anti-rabbit lgG (1/500) was used as the secondary antibody. DAPI (blue) was used as the nuclear counterstain. <a href="mailto:ab7291">ab7291</a>, a mouse anti-tubulin (1/500) and <a href="mailto:ab150120">ab150120</a>, an Alexa Fluor<sup>®</sup> 594-conjugated goat antimouse lgG (1/500) were also used.

Control 1: primary antibody (1/100) and secondary antibody, **ab150120**, an Alexa Fluor<sup>®</sup> 594-conjugated goat anti-mouse IgG (1/500).

Control 2:  $\underline{ab7291}$  (1/1000) and secondary antibody,  $\underline{ab150077}$ , an Alexa Fluor® 488-conjugated goat anti-rabbit lgG (1/500).

Equilibrium disassociation constant ( $K_D$ ) Learn more about  $K_D$ 

Click here to learn more about K<sub>D</sub>



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